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WORKING FOR THE SOVIETS

AN AMERICAN ENGINEER IN RUSSIA

By WALTER ARNOLD RUKEYSER

NEW YORK
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TO MY MOTHER

FOREWORD

MR. RUKEYSER *has been kind enough to say that I am indirectly responsible for this volume. I should like to be its spiritual father, but the credit really belongs to Sinclair Lewis who, after a few minutes' talk with Mr. Rukeyser, sensed the remarkable value of the testimony which Mr. Rukeyser has to give as to actual conditions in the land of the Soviets as seen from the office of a chief engineer, the head of one of the greatest enterprises of the Five-Year program. Naturally I was happy to offer a medium in which Mr. Rukeyser might freely tell without let or hindrance just what he thought about the greatest experiment in government and economics*

in the history of modern times. He accepted and there appeared in The Nation *two of the chapters in this volume. So great was their success that he was urged to write a book and here it is. I am sure that it constitutes a most valuable contribution to the rapidly growing literature of the Russian experiment, if only because the author has played an important part in the development of the Five-Year Plan.*

OSWALD GARRISON VILLARD

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INTRODUCTION

MUCH HAS been written and spoken concerning the Five-Year Plan. Will it succeed? Will it fail? Equal attention has been given to dumping, convict and forced labor, communism versus capitalism, trade menaces, in fact to every possible aspect of what is perhaps the greatest political, sociological, and industrial experiment the world has ever seen. But how the workmen live, how they pay their bills, how these Russian human beings—people of flesh and blood and not mere abstract ideas—react to this gigantic experiment, how they work, how they obtain their food and clothing, what their amusements are, what their punishments—these questions have thus far been neglected in discussions of the Soviet Russia of today. Still another set of neglected questions would concern the everyday life of the American engineer in Russia. How does he work, live, eat, obtain his necessities, amuse himself, travel? What are his relations with the heads of his state trust; with the Russian engineers working with or under him? How does he get things done?

It is the purpose of this book to attempt to answer such questions as these; to set down without varnish or veneer the direct personal observations and experiences of an American engineer who has been doing either consulting or supervisory work for a Soviet Russian trust since 1928 and has spent the greater portion of his time since August, 1929, in the U.S.S.R.

The locale of this account is the Ural district, geographically Asiatic, politically European, temperamentally and climatically Siberian.

On the gentle undulating plain forming the eastern slope of the Ural Mountains, fifty-six kilometers east of Sverdlovsk, the capital city of the district (formerly Ekaterinburg, where the Czar and his family were shot), and some two or three hundred kilometers east of a signpost on the Trans-Siberian Railway bearing the words EUROPE-ASIA, is the station of Bajenova. It is some 2,000 kilometers east of Moscow and is only a local station at which the "express" does not deign to stop. Yet Bajenova, with its sprinkling of peasants' houses, its little "hotel" for the overnight accommodation of staff employes of the trust who must perforce break their journey there, its store-sheds and store-yards, is in reality an important place. It is the gateway through which has poured an ever-increasing stream of one of the world's important commodities—asbestos. North of Bajenova and the Trans-Siberian, thirty-four kilometers by a tiny narrow-gauge railway, lie what are potentially perhaps the world's greatest asbestos deposits; and from Bajenova there already flows east and west, to the value of several million gold rubles annually, a steady stream

of asbestos fiber which has been mined from the ground, separated from the waste rock enclosing it, and processed for adaptation to a multitude of uses.

At the northern end of the little narrow gauge lies the mining community known as Asbest, where are centered the activities of the state trust, Uralasbest, by which the industry is administered. In this community and its vicinity there are today nearly 40,000 people, of whom more than 13,000 are employed in the many ramifications of the trust's work. Chief among these are the mining and milling of the asbestos-bearing rock. Auxiliary thereto are power plants, railway and transport systems, brick factories, foundries, repair shops —all the instruments necessary to carry out a great expansion program involving mechanization and modernization of existing mines and mills, the erection of new plants which are the largest of their type in the world, and, finally, the carrying out of a housing program for this army of workers and their families, with all the civic requirements of hospitals, clinics, primary schools, trade schools, water supply, lighting, fuel, stores, workmen's clubs, recreation centers, theaters, roads, administration buildings, and even a hotel and a geological museum.

Asbest was the laboratory in which my own work on the experiment of the Five-Year Plan took place. I was the only American engineer there. Except for the time when my wife was with me, there was no other English-speaking person nearer than Sverdlovsk. German was our main working language with the engineers and executives; at the end of six months I had a suf-

ficient grasp of Russian for our other contacts. From August through December of 1929 I was observer and consultant; from the following June through January of this year I was an active participant in the work, with a trip out to America in the interim to orient myself and to permit of comparisons upon return. So much, then, for my *apologia*.

W. A. R.

New York,
December 15, 1931

WORKING FOR THE SOVIETS

AN AMERICAN ENGINEER IN RUSSIA

CHAPTER ONE

TOMORROW—MOSCOW

THE OUT-MODED *wagon-lit* jolted to a stop, its wooden sides creaking in every joint. This was no "Blue" train, —no de luxe equipment here. But, nevertheless, it was, and is, probably the most interesting train in all of Europe, The Paris-Berlin-Warsaw-Russian Frontier "Express."

It was barely six-thirty on an August morning; but in those northern latitudes the sun was already streaming hotly and brightly into our compartment. Overnight from Berlin and we were in Warsaw. My wife and I hurriedly dressed. We had an hour's interlude here and both were eager to catch a fleeting glimpse of what had formerly been a part of czarist Russia.

The station at even that early hour already teemed with life. Porters scurried to and fro bearing prodigious burdens—portmanteaus, valises, bundles. I thought of the Grand Central with its suave, somewhat supercilious Red Caps, and I wondered at their reaction if similar burdens were imposed on them! Even the fourteen cars

making up the train to the Soviet border were interesting. French *Wagons-Lits,* of wood; Belgian third-class coaches, of steel; German cars, Polish cars—all bearing their route-signs with unpronounceable names.

Everywhere were unmistakable signs of order and cleanliness. Cleaners were set immediately to work on the train, inside and out. Aisles were swept out, windows wiped, all the dust and grime of the previous night's journey removed. A Polish State Railways' dining car was switched in. But it was the people who interested us most. The platforms swarmed with well-dressed, obviously well-fed bourgeoisie. Newsboys cried the early morning papers. Commuters were scurrying from locals to their work. An orthodox Hebrew with black skullcap, in a long, double-breasted coat buttoned tightly over a quite protuberant middle, stood nonchalantly reading the news. An occasional tourist going to or from the station. But above all—and everywhere—the military. Soldiers, countless soldiers, of every rank and grade, representing every branch of the service, embarking and disembarking. Officers predominated, officers, resplendent and shining in perfect equipage, none without a decoration of some sort, most seemingly weighted down with the load of medals on their tunics.

Here then was a startling observation. It seemed that for every civilian we saw, there were three men in uniform. Was this a country at peace? Had these morning papers which were printed in a language we could not read proclaimed Poland at war? Was this a general mobilization we were witnessing? And as if to confirm this absurdity a squadron of planes roared overhead, keeping its perfect formation awhile completing Immel-

manns and dives. Our train became submerged with army. And our train was headed for the Russian frontier. Then the truth dawned. With little publicity in the capitalistic press of the world, Russia was having a misunderstanding with the Far East over the Chinese Eastern Railway. A fellow passenger, a Russian returning to Moscow, had intimated something about French provocation. And, of course, France meant Poland. Suddenly I began to understand. Our trip to Russia promised to be doubly interesting.

As the signal warning of our departure sounded, the famous Nord Express with its all de luxe equipment and huge Baldwin-built locomotive came to a grinding stop. We looked with envy upon it. But before we were to stop again upon that Warsaw platform the train which was slowly gathering speed bearing us toward Russia would seem a veritable "Twentieth Century"—if we only had known it!

From Warsaw to Stolpce, the Polish port of exit, is a day's run. Leaving the capital at about seven-thirty in the morning, one arrives at the frontier the same evening. The dining car we found already usurped by the military. Two vacant places remained. But as we made to occupy these we were abruptly shunted aside by two officers. Had we not consulted our place-cards? Could we not observe the numbers of the seats? The English was perfect—too perfect. But after we were seated, the breakfast was delicious, the food beautifully prepared and perfectly served. We had a meal of several courses for what ham and eggs alone would have cost back home. And the Polish mineral water was as good as the best.

At my right an infantry officer was finishing the

last of an obviously large meal. In excellent English he introduced himself to us—Captain Count So-and-So, returning to his regiment at Stolpce. Next to my wife a flaxen-haired, stoutish, pleasant-faced German woman was taking the place just vacated. Our Polish friend lost no time in telling us his life's history and trying to find out ours. So we were going to Russia? How interesting—and had we liked Warsaw? What, not stopped there—*quel horreur!*—no, he did not refer to the city, but to the unbelievable fact of our not having tasted of its joys. These he commenced to digress upon fully and in complete detail—to the utter disparagement of Paris, Vienna, Budapest, and other centers of iniquity and to the equally utter embarrassment of my wife. While he was getting thoroughly warmed up to his subject, we commenced on our omelet. We then learned in quick succession that he had returned from Russia but a fortnight before where he had been military attaché to the Polish embassy in Moscow, that apparently no ballerina remained who had not known his romantic approaches, that the orgies which he had staged in that unsuspecting country would make Boccaccio read like Aesop's Fables, that he had been to America, studied there, and had left a train of broken hearts up and down Park Avenue, and that the farewell party his friends had given him the previous night in Warsaw (that was why he could hardly touch his breakfast—such a "hang-up," or is it "hang-over," you Americans call it).... I firmly suggested that possibly the German lady could understand English, and the German middle class being so notably conventional in its conversation with strangers.... He left us with a flourish of card-giving, a clicking of heels, and a

too-lingering kiss of my wife's hand. For some reason I began to dislike the Polish people.

*

WE SPENT the day watching the landscape panoram past us. As the train progressed farther and farther eastward on its journey, the villages became more and more Russian in appearance—less and less European. Here and there the undulating plain would be broken by a mere group of log houses, grass thatched—the houses huddled together, the farms radiating away from the "village," reminiscent of the times when Poland was ruled from Petersburg. Most interesting to us were the still obvious ravages of the war. Scarred fields with former trenches yet visible; devastated woods, with second-growth just beginning to make an impression upon the landscape; factories shot to pieces and never rebuilt; railway bridges twisted and bent so badly that they were entirely discarded, or only so slightly damaged that their torn members could be replaced with strengthening splints.

One could not help marveling, however, at the great strides, evident everywhere, that the country had made in little more than a decade. At every station at which we stopped—and often alighted to visit the buffets or to purchase stamps or postcards or other knickknacks—we saw the same cleanliness, abundance of appetizing foodstuffs and beverages, the same well-dressed, well-fed, cheerful people, the same spick-and-span soldiery on guard. Along the line, men and women were working on improvements of the right of way which, being rock-

ballasted and constructed according to American railway technique, was remarkably free from dust and well graded. Even the bulk of the rolling stock seemed comparatively new; and the stations, gleaming with freshly painted surfaces, were proof of the care with which the lines had been rebuilt and maintained. The Polish railways are standard gauge since the war; previously they were uniform with the Russian roads, considerably wider than standard. I learned the reason for this difference later in our trip.

Settling down to our day's journey across the Polish Republic there flashed across my mind a jumbled picture of mixed impressions and preconceived ideas about Russia resulting mostly from reading, partly from conversation. It suddenly occurred to me that here we were on the very threshold of the Five-Year Plan. On the morrow, —in fact that very evening at the border—we would begin to see a chapter in history being written. Here was something as vital as the French Revolution, something possibly far more outreaching in its effects.

Today, in 1931, the Five-Year Plan has already become a commonplace on every American street, in every American home—on screen, stage, the printed page, in our everyday conversation. But in August, 1929, on our first trip to Russia, little if anything had yet been heard about the Plan in America. Even I, as a mining engineer engaged to consult upon and make recommendations concerning the expansion of the asbestos mining and milling industry in Russia, had not yet fully grasped the fact that what I had been brought over to do for this one comparatively small industry was but part of a gigantic plan preconceived in every humanly pos-

sible detail for each and every industry in the Soviet Union. The true realization that there had been conceived a Five-Year Plan and that we were entering upon the initial phases of it only dawned upon me considerably later on.

I doubt that at that time there were over a dozen American engineers or firms acting in a consulting capacity for the Soviets. I do not include, of course, those Americans working directly for some large engineering organization, which as a company held a "Technical Aid" contract with Russia. I speak only in comparison with the present day when it is said that many hundreds of American technicians are employed there, some in consulting capacity, some working directly for Soviet trusts, some on direct operating work, some "breaking in" personnel, some designing, some supervising construction.

Is it to wonder, then, that as every click of wheel against rail-joint presaged our imminent personal contact with the Soviet experiment, I felt a thrill of anticipation? I had worked from Labrador to the Equator, mushed dog-teams in the sub-Arctic, taken expeditions up tropical rivers in South America, pursued my profession in the capitals of Europe; but this to me was something of a different quality from what had gone before. The other seemed primarily to have dealt with natural forces; this trip to Russia went beyond that. I was about to witness a battle of ideas, a conflict of civilizations; this work involved *people*, human beings; I was being whirled into a laboratory which experimented not only with iron and steel, stresses and strains, but with a hundred and fifty or sixty million human

guinea pigs! Where before each piece of work had been a job in itself—a complete entity involving only dollars and cents on a balance sheet—this one was a cog in a huge wheel, where dollars and cents were still a consideration, but where a sociological and human result was the primary stake.

Our approach to Stolpce was heralded by the taking up of our passports by Polish officials in uniform. They were courteous and friendly. One who spoke a bit of English started chiding us about what we would encounter in Russia. This Polish-Russian rivalry and tenseness seemed to permeate everything, everywhere. The officers at the border were just a little more polished and shining, the buffet just that much more elaborate and cleanly, the actions of officials just a bit more polite—all as though to say, "Compare us with the other side of the line."

At Stolpce, the train stopped to permit baggage inspection by the Polish customs. Each piece was checked to be sure that none had found its way into Poland. Our passports, viséd, were returned. The officials departed. The train continued on its way across that no-man's land between Stolpce and Niegerelov, the Russian port of entry. At that time, the French-Belgian-German-Polish train physically entered Russia, the passengers for Moscow transferring to the Soviet wide gauge at Niegerelov. On our second trip the procedure was different. We left the one train at Stolpce, passing through the Polish barrier at the station and boarding the Russian cars on the other track opposite.

Across this few kilometers of no man's land the train lumbered slowly, dustily, and with much rocking.

Gone was the rock-ballasted roadbed. A few minutes later we saw the barbed-wire entanglement demarcating the actual border. A second after, we passed under a rough portal-like affair betokening our arrival on Soviet soil. On one side the Polish garrison, on the other the Reds, with their womenfolk, their children, their everything. More minutes of dust clouds and we drew up to the timber-hewn station of the Russian border town, Niegerelov.

Our passports were taken, their American character quickly observed, the entry visas stamped thereon, and the letter from Amtorg bearing the seal of the powerful Supreme Council of National Economy noted, with a courteous smile of what was apparently meant for approval. In the interim our luggage, large and small, had been removed by porters to the *Tamojna,* or customs. Here, after the confusion of getting one's personal belongings together had subsided, and the porters had been paid the fees stipulated by regulation (and for which receipts must be issued and accepted), came the actual inspection. At that time the Soviet-Tourist Bureau, Intourist, had not been organized to the state of present-day efficiency and we found that only one official could so much as recognize the English spoken word as such. Several spoke German, and fluently, but none knew or would admit knowing French. While we were awaiting our turn, we observed our fellow travelers with much interest. A German technician, obviously going into Russia for a long stay, had brought with him one of those justly famous Teutonic hampers which seem to have no bottom. Soon every item of this poor unfortunate's personal life was strewn promiscuously before

the gaze of the more than mildly interested onlookers. The Russians seemed fascinated. Out came technical books, plans, blue prints, instruments, clothing, an electric iron, a bed-warming pad, "woolies" and what not. Each page of every book was carefully perused, to see if any anti-communistic propaganda was concealed therein. Every plan, map, and blue print was placed under the most detailed scrutiny. The instruments, however, brought forth exclamations of praise and appreciation. And so with each passenger. I heard one American (I found out later when I had the pleasure of meeting him that he was negotiating a most important contract in Moscow), using beautiful idiomatic English when he was instructed in the sign language to unroll what must have been a hundred blue prints of large proportions, despite the futile pleas of his companion, another American who seemed to know his way about. But unroll them he must and did.

Upon presentation of the Amtorg-Supreme Council letter, the official who finally busied himself with us showed but a fleeting interest in the contents of my briefcase, our few books, and remaining plans and papers. He thought a moment over a *Cosmopolitan* and a *Saturday Evening Post*, but then decided, since they were printed in English (and so few Russians knew English compared to German), that little, if any, bourgeois propaganda could be contained in them. At any event, the examination seemed to us cursory and, compared to the liquor-searching scrutiny of our American customs, even perfunctory. Courtesy seemed to be the byword. But at this moment, to our great agitation, they pointed

to my wife's jewelry and to my typewriter and cameras. I had read in the Soviet guide-book that one was allowed "one gold watch, one pair of cuff-links, etc.," but had been assured that the regulation meant nothing to transients. Fortunately, no one understood either my wife's or my own remarks at this particular stage of our first trip to Russia, or I doubt that we should have been permitted within the country. But the official soon returned with jewelry, typewriter, cameras—everything. He gave us slips of red and white paper and mentioned the word *kvitancia,* followed by what was purported to be in English the word "receipt." Then we understood. The articles were simply being admitted, under a perfectly normal procedure—under bond. These receipts were to be a constant source of worry and wonder to me; worry during the entire trip that I should lose or misplace them, wonder, upon our departure from Russia, that no one asked to see them, even though they were most punctiliously numbered, signed, countersigned, and sealed. I have them here in New York to this day.

It has taken time to record these trifling events, but it took even more time to live them. Bells began ringing, porters became restless, passengers took on that drawn and strained look which presages an imminent train-departure. We still had our two *pièces de résistance,* our trunks, to be inspected, to say nothing of an enormous kit-bag. In my dictionary I scrambled for the words "perhaps," "customhouse," "Moscow." It worked. My official nodded acquiescence. There followed rapid instructions. Our large pieces were strapped and sealed. Porters grabbed everything. I rushed to the sleeping-

car window. Yes, reservations were awaiting us. The luggage disappeared. The official pointed to my pockets. I understood. I sprinted to a window marked "*Kassa,*" emptied my pockets of foreign *valuta,* glanced at the rate-of-exchange board showing 1.95 rubles for the dollar, the equivalent in marks, zlotnies, francs, pounds, grabbed the rubles and, above all, the receipt, and mindful of the fact that letters of credit and travelers' checks can be taken in and out of Russia without formality or restraint, dashed for the train where my wife awaited me.

Again relaxed, I began to think about that aching void soon to be filled in a Russian dining car and proceeded to examine everything with interest. There swarmed about us a mass of peasants curious as children—the great unwashed, in clothing typical of our best Russian movies out of Hollywood. We noticed the funny little locomotive made, as a prominent sign proclaimed, by Mr. Putilov in the year 1897, and the huge cars, out of all proportion to the engine. Just then the American who had, during the customs procedure, displayed such obvious knowledge of all things Russian, hove in sight laden with parcels of food. "Have you bought your supper at the buffet?" he inquired pleasantly. "Thanks, no," I answered, equally pleasantly, "we will have dinner in the dining car." "But there is no dining car until morning," he answered. In panic I dashed at his direction to the swarming buffet and gathered a kilo or so of roast pork, two large pieces of bread, a half-dozen hard-boiled eggs, and two or three tomatoes. I threw down the rubles before the dumbfounded

woman attendant and, amid startled cries of "*Amerikanitz, pravina, Amerikanitz,*" caught the moving step of the next to last car. We ate.

And tomorrow—Moscow!

*

CHAPTER TWO

MOSCOW, 1929

THE STATION one arrives at in Moscow depends upon the route taken. The one which we had chosen, from Berlin via Warsaw, consumes two nights and a day, or approximately thirty-nine hours. Another, which I was to take leaving Russia, is via Riga (formerly czarist domain, now republican Latvia), Königsberg, and Berlin. The former route affords a splendid opportunity to see East Prussia and much of Poland, while by taking the second, the traveler may vary his knowledge of northern Europe by seeing Latvia, Lithuania, Königsberg, and the Polish Corridor. The time consumed is approximately the same, the latter route requiring only two or three hours more; the cost is somewhat lower, some sixty-eight or seventy dollars against a possible seventy-five.

A third possibility for unhurried travelers is the summer route through the Scandinavian countries to Helsingfors. The Baltic boat trip (when taken on German ships) from Stettin is, I am told, particularly delightful, and one can even go direct to Leningrad for a

little over thirty dollars and seventy-two hours of time. From Helsingfors to Leningrad by rail is only a matter of a few hours and from Leningrad to Moscow an overnight trip. Both from Riga and from Helsingfors one boards the Russian wide-gauge cars directly and goes to Moscow without further change. I personally prefer going in through Riga, not only for the above reason, but also because the route seems lesser traveled and the congestion at the frontier not nearly so heavy.

As we stepped off the train that next morning in Moscow, a new and different world opened up before us. We had been told in Berlin that we would be met at the train by an interpreter-representative of the Trust. No sooner had the train come to a stop and we and all our belongings been bundled onto a seething platform, when a short, pleasant-looking chap, not over twenty-three or four years of age, approached us. He was dressed as one would picture the younger intelligent Russian of today—the unvarying cap, the worn, outmoded clothes, clean but unpressed, giving mute testimony of the difficulty of replacement in present-day life under the Soviets.

"*Bitte sehr, mein herr; aber wahrscheinlich sind Sie Herr und Frau Rukeyser?*" he asked. I gasped a stammering affirmative. He introduced himself, using only his family surname, not the Russian patronymics with which we were to become so familiar later. Slowly, painfully, and badly I asked him in German if he spoke or understood English. He replied in an unqualified negative. "But didn't they know in Moscow we were Americans?" "*Bestimmt.*" But Amtorg had advised them that I knew German, and English interpreters were scarce.

No one attached to the Trust's Moscow office knew English. We must bear with him as best possible.

I made up my mind, there and then, that speak German I would. This entire incident, I reflected, was probably my own fault. Amtorg had asked me what foreign languages I knew. I had told them of the French, Spanish, and German that I had *studied* at school and at the university, and to some extent had used. Now, somehow, this absolute necessity for knowing a language broke down some psychological inhibition within me. Dormant recollections seemed stirred—brain cells long quiescent came to life. I found myself actually speaking German—poorly, hesitatingly, ungrammatically, to be sure, but still obviously making myself understood. Before we had finished our first sojourn in the Soviet Union, I was actually thinking in German, and though the grammar was still bad and my construction equally so, it rolled effortlessly off my tongue. Later on, I had the same experience with Russian, and after my wife left for America during our second trip, I spoke not one word of English for a period of more than four months.

A porter had been procured and with remarkable ability had hung and strung himself about with our luggage. A trip such as this—commenced on a hot day in summer and destined to extend into the frigidity of a Siberian winter—necessitated a wardrobe ranging from dinner clothes to mining boots, and included such sundries as typewriter, cameras, and engineering instruments, and involved the transportation of many pieces of baggage. Nevertheless, with the aid of a piece of rope and a sash which had previously done service in the support of his own clothing, the porter staggered the

hundred yards or so, fighting his way through masses of proletariat, leaping barriers of assorted household wares in the best Russian manner, straddling numerous progeny of worker and peasant strewn about the floor of the station awaiting next Tuesday's train—and all this with, at a conservative estimate, two hundred pounds of burden.

The sights and smells of a Russian railway station are never-to-be-forgotten experiences. The latter, particularly, is one which, in my experience at least, can not be likened to any other in the world. It is sort of a combination of rancid food, bodies long unwashed, a sickening remnant of stale disinfectant and unaired, musty clothing, plus the odors of various assorted domestic fowl and animals. The sight is equally unusual. This station in Moscow streamed with an incessant flow of humanity. It seemed as though all of Russia had suddenly decided to see Russia first (which, since they are not allowed to leave the country, they must perforce do). Men and women, obviously office workers, the former in caps, in blouses, their trousers stuck into high black or tan Russian boots, in business suits of the "gay-ninety" vintage; the women, their skirts in most cases sufficiently above the knees to display a racial characteristic of well-shaped legs, usually with shawls over their heads, or else without head-covering of any sort, dashed about at a tempo which would make the New York subways seem by comparison a restful place. Then the factory workers and finally the simple Russian masses. These are garbed in anything and everything procurable—perhaps a bundle of rags wound around their feet and legs, perhaps straw sandals, perhaps, in rare cases,

badly-worn, mud-bespattered boots; usually be-bloused in true Tolstoian fashion, the women with red shawls wound about their heads, the men, either completely bare-headed or with stiff-visored caps, completing the picture. But everyone with bundles, some rudely wrapped, half-exposing a cut of smoked sturgeon, others with no attempt made to conceal the bunch of garlic. Groups rested on the floor of the main waiting room, sleeping, playing the accordion, munching black bread and onions, while their children, quite naked or with merely a slip covering their little bodies, mewed and spewed, cooed and cried. Samovars and kettles were everywhere, and the bundles representing their entire worldly possessions were clasped avidly to them—for stealing, to the average Russian peasant, has no great moral significance.

Through the hole made for us by our impedimenta, we followed with our interpreter and finally emerged into the open space of the square. We were at once surrounded and almost suffocated by a solid phalanx of droshky-drivers, alms-seekers, newsboys, and others merely curious to see the strange phenomena from America. Our guide finally extricated us, but even up to the moment of our disappearance into the high pre-war Renault taxi, my wife's clothes were being fingered by the females and mine by the males.

How that antiquated vehicle was able to negotiate the two or three miles from station to hotel over the appalling irregularities of the Moscow streets without completely disintegrating during the process will never cease to be a source of wonder to me. There were the driver and his partner (free traders, they themselves

owned the conveyance), my wife, the interpreter, myself, and the two-hundred-weight of luggage. But make it we did, and in short order. There was something curiously strange about the streets through which we were passing, a lack of something so familiar to our subconscious minds in America that for quite a while we were unable to determine what constituted the difference. Suddenly it occurred to both of us, and almost simultaneously we exclaimed, "Why, there are no automobiles here!" Gone was the smell of gasoline fumes, gone the screeching of horns, gone the vehicular jams at street intersections. Instead, streets and avenues almost empty of traffic—occasional horse-drawn lorries filled now with beer kegs, now with firewood; frequent droshkies, those one-horse throwbacks to the Victoria, usually dashing along at a great rate of speed, their tiny wheels rattling over cobblestones and lurching in and out of prodigious holes; occasional bicycles, and still more occasional motorcycles; rarely an automobile. These last were nearly all of the same pre-war vintage as the one in which we were now riding. Our interpreter told me of the fearful shortage of motorcars, of the newly "achieved" Ford contract, of the five thousand Fords a month which were just at that time commencing to be landed in Russia. (A few months later these same streets were comparatively "overrun" with the latest product of the Wizard of Dearborn.)

The sidewalks, however, presented a different picture. They teemed with life, overflowing to the gutters. All these hurrying, scurrying masses ploughed along at a furious speed, as though whatever they were hastening to do must be done today, and there would be no to-

morrow. They all ran to type. Most, apparently, of the office-worker class, dressed in a monotonous sameness of manner, nearly always with portfolio or briefcase (no Russian brain-worker goes out of the house without one); here and there the uniform of the Red army, navy, or military police; once in a while, the dark-brown tunic of the GPU or the leather jacket so dear to the heart of the Soviet official. Occasionally a peasant, a worker, a Tartar, a Bashkir, or a representative of one or another of the 170 races now comprising the Soviet Union.

The cost of the taxi ride from station to hotel was ten rubles—over five dollars gold. There ensued a lively argument between the piratical drivers and our guide. The former discoursed vehemently upon the frightful cost of gasoline and the wear and tear on the machine (which I mentally agreed must have been tremendous); the latter explained we were not tourists but in the service of a Soviet Trust which ultimately must pay the bill. He would report this outrageous holdup, have their license revoked, and so forth. He finally compromised by paying them ten rubles.

The Savoy Hotel in Moscow had been recommended to us as the best, at that time, in the city. We found it in the throes of a rehabilitation which did little to detract from the air of dismal depression which permeated it. A suite had been engaged for us and we were forced to climb a series of flights to reach it, the lift, as always in Russia, being for decorative rather than utilitarian purposes. But first we deposited our passports with the *portier*, becoming immediately aware of the fact that this personage behind the desk was no mere room-clerk. It is common knowledge now that the major hotel, rail-

way, and tourist-bureau employees are members of the dreaded (by Russians) GPU. In fact, it is my own belief that even the waiters, chambermaids, and lesser satellites, since most of them are required to know something of foreign languages, are also members of the politically-minded secret police.

We found ourselves assigned to not uncomfortable, fairly clean quarters overlooking a narrow street but still commanding something of a view of the towers, domes, and minarets which give Moscow its semi-oriental appearance. Two cots, a wardrobe, and one of those silly little washstands that burble a stream of water from a hand-filled tank (the stream may be directed up or down by the turn of the spigot, and power is supplied by a foot-pedal which must be depressed during one's ablutions) made up the furnishings of the tiny bedchamber. The bath had evidently been added quite recently as an afterthought, to the attendant sacrifice of the bedroom. The living room was filled with an agglomeration of severe, rather ridiculous furniture turned out by the Soviet factories of today—modern stuff in the proletariat manner. The chairs, settees, etc., were hard and uncomfortable, and invariably covered with red or green plush. Mirrors, ingeniously incorporated into bookstands and whatnots, reminded one of one's shortcomings at every turn of the head. The walls were calcimined a sickly blue, the border motif consisting of red and gold stars punctuated by sickles and hammers. Not altogether a cheerful scheme of decoration.

Our interpreter rang for a waiter and ordered us up some really good ham and eggs and coffee. Although

I could see with what self-denial he was refusing to join us, refuse he did, nor could he be persuaded to take even a cup of coffee. The reason for this became clear as we learned more about Russia. Being of obvious bourgeois origin and education, and fearing every waiter as a possible GPU agent, nothing could have induced him to partake of food with us.

I believe it necessary here, for the reader fully to understand and interpret our later experiences and observations, to explain the nature of the GPU, its purpose, how it functions, its relation to the foreign specialists and their daily life and work, and its bearing on the language problem. So let us drop our narrative at this point and inquire into this organization, the very mention of which in Russia is a signal for unreasoning terror.

CHAPTER THREE

THE GPU

A FAMOUS Moscow correspondent once said to me, "Rukeyser, the only obvious difference between the Soviet Union of today and the czarist Russia of yesterday is the terminology. They used to be cartels, now they're collectives; they used to have an absolute monarch called a czar, now it's a virtual dictator whose powers are as great, if not greater than the previous ruler's; formerly there were the farcical parties of the Duma; now, any opposition from one wing or another of the Party is a sign of heresy; formerly, it was the Okhrana, now the GPU."

Naturally, he was not commenting upon uses, objectives, and motives. But the analogy in *forms* was intensely interesting.

The OGPU, as we are accustomed to see it written over here, is known to the rank and file in Russia without the initial *O* as the GPU. There has sprung up throughout the entire Soviet terminology the practise of calling the host of different organizations either by their

initials or by a synthetic word corresponding to, for example, our Nabisco (National Biscuit Company). Thus one never hears the full name of the Supreme Council of National Economy, which in Russian is a mouthful; this body is always referred to as the "Vay-Ess-Enn-Cha," the pronounciation of the Russian letters B.C.H.X., corresponding to the Latin equivalents V.S.N.K. And so on with every organization making up that great complex known as the Union of Soviet Socialist Republics.

The GPU, as we shall call it from now on, is to my mind the most powerful, the best organized, the most unique organization of its kind which history records to date. To understand its formation we must first be impressed with the fact that the Soviet Union, comprising as it does, nearly one-sixth of the land surface of the globe, has a population roughly estimated today at 160,000,000, embracing over a hundred different races of people speaking nearly two hundred different languages and dialects. Of this enormous population I am told that not over 12,000,000 represent workers, possibly a million or two represent the intelligentsia, another the military, and the balance of, say, 145,000,000, peasants. From all of this tremendous number of inhabitants and from all these various class-elements are mustered the members of the Communist Party. The Party, as it is commonly referred to, has at the present time some 2,200,000 members. This minority, representing less than two per cent of the population, controls the destinies of the other hundred and fifty-odd million souls. To become a "party member" is something like becoming a thirty-second-degree Mason. Not only

must the candidate have proven himself by actions, creed, and dogma; all his antecedents and entire "history" must warrant this trust. It must not be supposed that the Communists are only drafted from the rank of peasant and worker origin. Surprisingly to the contrary, some of the outstandingly powerful members are sprung from bourgeois—in some few extreme cases from aristocratic—families. Stalin himself, as is common knowledge by now, in his youth studied for the priesthood. Many preëminent professors and savants are members high in the party. One important commissar held a high post under the czarist régime. All probably had revolutionary leanings in czarist days. It is one of the reasons that the Jews are represented in the party patently out of all proportion to their racial minority. Having been always under the former régime, the most anti-Semitic court of modern times, the objects of abuse, humiliation and pogroms; having been always out of favor, they naturally enough show the best "history" for becoming Communists of high responsibility.

From the members of the Communist Party have been recruited the members of the GPU, an organization representing the *crême de la crême* of the tried, true, and faithful. I cannot say whether or not it is necessary to be a party member to belong to the GPU. By the very nature of the work to be done, I should certainly think so. But it is equally natural that the organization should recruit *agents provocateurs* from outside the formal Communist ranks.

The GPU has its physical representation in every village, town, and city throughout European and Asiatic Russia. In every mine, factory, hotel, railway station,

and office may be found an agent of the secret political police, although they are not easily to be recognized. For the members are probably as often women as men; ballerinas, artists, teachers, doctors, chambermaids, guide-interpreters—all are potential GPU agents. Do not laugh off this statement as a rank exaggeration. It is gospel truth. It is said that even ten per cent of the Amtorg personnel in New York City are agents of the GPU. Whether or not that percentage is correct does not matter; the fact remains that in lesser or greater numbers the members of the secret Soviet political police are within the shadow of the Empire State Building, keeping a secret watch over their trading brothers. For there is always the fear in Moscow that the lure of capitalistic gold may wean a hitherto perfectly good Communist from his Marxian and penurious past. That their fears are not without foundation is witnessed by the several occasions on which high party members working abroad have succumbed to what we feel to be a natural desire to acquire the goods of this world; and, having done so, have refused to return to the fatherland for trial and punishment.

The greatest, if not the only, sin in Russia today is the act, deed, or thought directed against the State. The bogey of counter-revolution has become the monomania of the Kremlin. It is all we heard in Russia—in the papers, at the cinema, on the stage, and in every office. At one time it was supposed to have been provoked by the remnant of former bourgeois intelligentsia, the "enemy from within"; next, the provocation came from hirelings of hostile, capitalistic states, from without. Every man, woman, and child in Russia today—

even though a member of the party—is under the constant suspicion of this dread organization. No act too petty, no word too light, that some deeper, sinister significance may not be attached thereto. One's best friend may be a *provocateur;* a child's innocent remark at play or at school may cost his father's life; that pitiful extra ounce of white flour from a foreigner may be observed, reported, and construed as a reward for revealing to the "capitalistic representative" some state secret.

Is it a wonder then, especially when one considers that once the GPU strikes, the victim is considered guilty unless he can prove himself innocent (the price of guilt in the past was so often death), that the Russian engineer and office worker live under an omnipresent dread? To intensify their fears, all manner of subtle psychological methods are employed. Arrests are usually made at night—for the most part, I was told, between midnight and dawn, at the hour when human resistance is at its lowest ebb. It is because of the secret GPU agent that the native engineers are so loath to have social intercourse with the foreign specialists. Their natural curiosity as to what is going on in the capitalistic world could find an outlet in such contacts. But such knowledge is not encouraged in Moscow. Then, too, there seems to be continual suspicion that through such intercourse the foreigners may spread disaffection which might in turn reach the masses. It is the old story of "what they don't know doesn't hurt them." Also, such intercourse between intelligentsia may give impetus to political proselyting on the part of a foreigner; may even lay the groundwork for arousing the poor Russian technician's desire for those luxuries which he will be bound

to see in the home of the American or German engineer; may even, in extreme cases, lead to rank out-and-out counter-revolutionary activities in the form of exchange of secret data in return for *valuta* or bourgeois knick-knacks. Such is the theory back of the reticence of the Russian to meet his foreign co-worker upon any but public ground.

Such reasons as these, coupled with the fact that the stabilization of the *chervonitz* is maintained by purely artificial pegging, are why the importation of foreign *valuta* is prohibited at the borders. During the past five years, when the oppression of the former bourgeoisie in Russia has been most severe, possibly the main reason that this most unfortunate class has not attempted to flee the country to find asylum across the frontiers has been the lack of *valuta.* In the early days of Bolshevism, when foreign currency still remained in the hands of the people along with gold, platinum, and jeweled ornaments, many an oppressed technician or former aristocrat was able to buy his way out of the country. Then came the laws making the ownership of *valuta* of any description punishable by death; and so rigidly did the GPU ferret out such possessions that practically nothing of the sort remains in the hands of individuals. Then, too, before the beginning of the Five-Year Plan, this class as a class lacked the opportunity of obtaining even the paper ruble; and to exist it was forced to dispose of its possessions. This, then, explains why the educated classes, who had not embraced communism, have been kept under the control of the Party, and also why intercourse with foreigners would expose them to the constant suspicion of the GPU.

It is not to be supposed from what I have said above that all agents of the political police are secret spies. On the contrary, the organization boasts of splendid uniformed personnel. These are the officials who have an office in practically every railway station throughout the Soviet Union. And there is not only an officer class among these, but also a large uniformed soldiery attached regularly to the GPU. We thus find that the nature of the organization is twofold; first, a division of secret agents circulating through the population at large, their identity very probably unknown even to one another; second, an open, uniformed personnel of officers and men, who have distinctive uniforms, special barracks, the best quarters in Russia, whose annunciatory signs, with the letters O.G.P.U above, cause an involuntary shudder even in the passing foreigner.

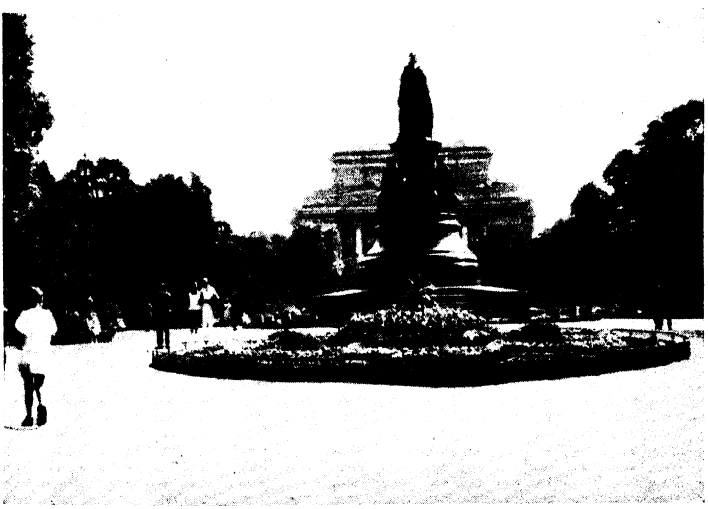
The American working in Russia will probably find the GPU to be at all times to him a friend in need. When transportation is difficult to procure (which means practically always), the GPU will give him space reserved especially for that organization. Should trouble arise concerning his passports, the GPU will always be found willing to help. Should he feel himself in any way persecuted or hindered by his Trust officials, Communists or non-Communists, the all-dreaded GPU can be relied upon to alleviate his difficulty. The GPU forms a sort of liaison organization between foreign technician and Russian co-worker. My own experiences along these lines will emphasize what I am trying to bring out in this connection and will be illustrated amply in what follows. The members of the GPU are alone among the Russian people of today who have nothing to fear from

contact with foreigners. They are police, judge, and jury. They are the dictatorship.

This brings us to a discussion of the language problem. The average American engineer is notably ignorant of foreign tongues. Our mining engineers of experience will probably know Spanish. Few, aside from those who may have had occasion to learn French during the war, know any other foreign language. The fault has not in the past, at least, lain with the individual, but rather with our system of technical education. Engineering students in this country usually have gone direct from secondary or high schools to technical schools. In neither school does the usual scientific course generally afford the opportunity for foreign language study. Where it does, the language elected is apt to be Spanish, since our technical work in countries outside of our own is in ninety-nine cases out of a hundred confined to Latin America. Of recent years, our better universities have recognized that engineering as a profession requires something far beyond mere technical knowledge and, Columbia leading the way, have required a collegiate and academic training before entrance to the specialized work of the graduate schools. Such a system of education, placing engineering on the same plane as the law and medicine, presents the opportunity of a thorough groundwork in the arts and classics, in economics, politics, and foreign languages. Thus, in my combined secondary school and work at Princeton prior to my engineering training, I was able to obtain at least a smattering of French, German, and Spanish, so that at such time as I might hear any one of these languages being spoken daily about me, the gram-



OCTOBER 25TH PROSPEKT, LENINGRAD, FORMERLY THE FAMOUS NEVSKY PROSPEKT



STATUE OF CATHERINE THE GREAT, LENINGRAD, ONE OF THE FEW IMPERIALISTIC STATUES REMAINING IN SOVIET RUSSIA. The Opera appears in the background



IN THE SHADOW OF THE CHINESE WALL —



INTEREST IN RELIGION STILL GOES ON.

matical groundwork coupled with a reading and pronouncing knowledge would make actual speaking ability merely a question of time and practice.

Not to speak German in Russia is second only to not knowing Russian. As I have previously observed, most of the present-day technical men in the Soviet Union, whether of bourgeois origin or not, know German. With so many Poles, Letts, Finns, Jews, and other former czarist minorities represented in the Communist Party and as high officials in the Russian trusts, it can safely be stated that fifty per cent of the executives know German. Now, for the American engineer working in the Soviet Union to have a real conversational knowledge of German means that the need for an interpreter is immediately eliminated, which in turn means that the fear (real, imaginary, conscious, or subconscious) of the unknown GPU agent-interpreter is removed. Then and only then, in direct communication, can the foreigner get at the heart and soul of the Russian people, learn their thoughts, their reactions to what is happening in Russia today, learn the real history of the past fourteen years. And better to learn the psychology of the worker, the peasant, the unlettered masses who, in the last analysis, really constitute the Soviet Union, I made up my mind that should I be called upon to continue with the work in Russia I would learn at least enough of the language to "get along."

Before leaving this question of the GPU for the present, I must bring out one more point. The Soviet Union is admittedly a nation at war—at war within with the fomenter of counter-revolutionary activity. And even though fear of this activity has reached the stage

of hysterical monomania with the Communists, and thus is undoubtedly exaggerated to the *n*th degree, it should not be lightly dismissed by the unthinking reader as non-existent. That it still does exist to some extent, that it has existed in the recent past to a very pronounced extent, no intelligent observer in Russia will deny. That such activity is doomed to extinction is equally obvious to anyone who knows "the system" and the workings of the GPU. Descended, as this organization is, from the fearful Tcheka of the Civil War period, when even the lack of a passport (which to this day every Russian must possess and carry with him continually) meant practically instant death, the GPU has inherited the experience, the dossiers, the technique, and the point of view of its parent. The parent was born of the Revolution; the offspring inherited the aftermath of Counter-Revolution. The Communist would long ago have been swept into historical oblivion were it not for the GPU—a statement as demonstrable as it is startling.

Not only is the Soviet Union at war with an enemy from within; it is admittedly at war with the capitalistic world at large. This means that for the dictatorship to endure, the GPU must be in virtual control of transportation and communications. A censorship of the strictest sort must be set up and maintained. I do not mean that the GPU is in administrative charge of all communications and transportation. This is not the case. But every letter, every telegram, every cable going in or out of Russia is read by the censorship, important excerpts filed and docketed, and in extreme cases photostated for future reference. Even communications from one point to another within the Union may be, and

often are, closely scanned by the local GPU before they reach their destination. Many is the time I heard the GPU cut into my telephone conversations from my hotel room; many the letter so obviously resealed that I could barely repress a smile when it was so disingenuously handed to me at the office. But on one occasion, when the mucilage had been so clumsily affixed as to result in the letter sticking to the envelope, my sense of humor took flight. I wrote the censorship in Moscow to this effect: "I don't resent your reading my letters before I get them; but I do resent your sticking them together afterward so damned badly that *I* can't read them." Needless to add, I never received a reply.

CHAPTER FOUR

A DELAY

NATURALLY, THAT first day in Moscow, I was all eagerness to get started on the consulting job I had been engaged to do. When our guide told us that the Trust (at that time) had no Moscow office, being merely represented semi-officially by another organization there, I anticipated being shunted off to the Urals, the actual locus of the work, without further delay. This feeling was substantiated by the representation of great urgency made by Amtorg's New York office. I felt that any sightseeing which we might wish to do would best await our return to Moscow upon completion of the work, at which time I could delay as long as I liked without charging the time to the job at hand. But we were soon to be disillusioned as to the efficiency of government-operated business, at least as conducted by the Soviets. And with this disillusionment, of which I should have had more than a faint suspicion from the interminable delays encountered during the negotiation of the two contracts

already consummated with the Soviets, came the opportunity to see Moscow and its environs at our leisure.

The first afternoon was spent in trying to locate someone in the Moscow office of Amtorg who even knew that I had been engaged on the work of Uralasbest. I had pleasant chats with several of the executives. I was told that the individual who would be most likely to know about my case would not be available until the following day. Our guide had already returned to his routine work at his own trust. So that was that.

Returning to the hotel, I explained to my wife that our time seemed to be quite our own to do with as we wished. In the lobby we were stopped by a charming, dignified, old gentleman, who advertised by his mannerism, by every detail of his appearance from well-groomed imperial to well-kept fingernails, that here was a "gentleman of the old school." He explained to us that he was working as a guide-interpreter and although he was unfortunately occupied that afternoon, he wished us to keep him in mind. This we assured him we would do, for the opportunity of seeing the city with one who had so evidently known the best in years gone by promised to be a most interesting experience. It must be remembered that this was in 1929, the first year of the Plan, when tourists not only were not solicited by the Soviets but even were not permitted, except for a special cause, to enter Russia. Furthermore, the guide profession as such had not yet been built up to its present state, wherein the younger element of strong communistic sympathies has been taught English and the proper things to say, show, and do. At that time the only available interpreters had perforce to be enrolled from the

former bourgeoisie and intelligentsia. And, in turn, this vocation was probably the only one in which the old, broken-down members of those classes could find ways and means of livelihood.

We decided to take cameras and stroll about aimlessly, guidebook in hand. This guidebook of the Soviet Union, obtainable through Amtorg or Intourist in New York (printed in English as well as in German and French), is indispensable, and I recommend it highly to those contemplating a trip to any part of the Union. In it is a wealth of material concerning anything and everything—even to a history of the Revolution and the forms and organization, political and industrial, of the country. It includes a complete set of excellent maps of European and Asiatic Russia, large- and small-scale maps of all important cities, and, above all, well-organized material relating to every public building and point of interest in the cities described, with directions for using bus and street car routes. In the case of Moscow and Leningrad, each museum is listed not only as it appears in the text, but alphabetically, and a concise, detailed description given of its history and contents. The same attention to detail is paid hotels, theaters, "kinos," opera, restaurants, drug-stores, telegraph offices, railway stations, and the like. That this material has been somewhat idealized, even the authorities will admit. It seemed to us, after fruitless hunting for this or that museum, that either it had been closed, moved, or not as yet opened. The book seemed to be part and parcel of the Five-Year Plan; many of the "goods" it described had not yet been achieved. But on the whole, considering the tremendous state of flux

of everything in Russia, it was sufficiently accurate. Concerning the listing of the *objets d'art* in the principal museums in Moscow and Leningrad, it was particularly helpful with its detailed plans of each room and its contents (both neatly numbered).

Of particular interest in the book are the route-guides between cities and over various rail, boat, and air lines. Thus, for example, the entire five thousand miles (eight thousand kilometers, the metric system having replaced the versts, etc. of czarist Russia) between the European border and the Far-Eastern terminus of the Trans-Siberian Railway are described in detail, kilometer by kilometer. The train schedules are given with the prices of various types of accommodations between major points; but since both schedules and prices have been fluctuating so frequently and so drastically, I cannot imagine how the book can possibly be kept up to date in those respects. Furthermore, time schedules seem to mean little or nothing to the Russian temperament. But all this notwithstanding, the book is more than worth while and constitutes a veritable storehouse of information, for the most part reliable. It should by all means be included in any trip to the Soviet Union, for we found it will lessen if not obviate the necessity of a guide.

The year of 1929 was a good one for the Russian people. The Five-Year Plan had just been inaugurated and that terrific urge to export everything and anything which the capitalistic world would buy, no matter what the price received, no matter how dreadful the need at home, had not yet been fully manifested. Collectivism was only in its earliest throes. The kulaks and nepmen

were thriving. No active anti-religious movement had as yet gathered real force. Industrialization and the mechanization of agriculture were going along steadily, but in an orderly, more or less natural, manner. The furious tempo and virtual hysteria of the Plan remained for the future; the population was practically unconscious of the efforts and sacrifices it would soon be called upon to make. People still smiled. One could still buy a dance record for the phonograph. Propaganda was intense but still at the stage where a sense of humor could make it endurable.

But how different the picture when we returned to Russia in the spring of 1930! How vast were the changes even in the life of a foreign consultant, one to whom everything at all available was made accessible! To my mind, it is only from personal experiences and observations such as are set down, truthfully and without bias, in this book that one can draw any conclusions concerning the results of the Soviet experiment. I have pointed out elsewhere that generalizations concerning Russia are today well-nigh impossible. That is due to the exigencies of the Plan, to its shortcomings and to its achievements. But in 1929 the conditions were not so unstable, so widely fluctuating from locale to locale, from day to day, as at the present time. If there was meat to be had in the open markets in Moscow, and butter and eggs, they were to be had also in every place we had occasion to visit. The standard of living at that time was really a standard. Today, nothing in Russia seems to be standardized, and for an economist or lay observer to try to generalize as to how the people in the Soviet Union are living and faring at the present time

is indeed a rank impossibility. It is only from thinking back to this first visit and comparing it with what followed during our second visit that I can really orient myself as to what is going on in the Soviet Union and how the Plan is functioning.

In those first few days in Moscow certain things stand out above all others in my mind. There was the lack of automobile transportation about which I have already commented. There was a tremendous military activity observable everywhere. Here a street choked with trucks in turn jammed with troops. Here splendidly equipped, apparently not badly trained companies of infantry, squadrons of cavalry, and batteries of artillery swinging along at furious pace. Particularly interesting were the regiments of women troops, with their brown tunics, short blue skirts above the knees, their bobbed hair (universal with the Russian women nowadays—but the soldierettes had a close clip in masculine fashion), their Russian boots, rifles slung over shoulders, bayonets in scabbards, nearly always singing or chanting as they marched.

Again I remembered the fracas over the Chinese Eastern Railway—and again I understood why. For whether or not the Kremlin actually thought so, the man on the street was made to believe that the Far-Eastern crisis *per se* was nothing; it was the capitalistic provocation behind the incident which was being fed to the people by spoonful, nay, shovelful. For in Russia it is inconceivable that anything be directed against the Soviet Union that is not in some way linked up with the Bank of France and the House of Morgan. I used to think with a smile that if everything attributed by Mos-

cow to these busy institutions indeed emanated thence, there was little wonder in the world-wide financial panic. But I rather suspect that the Bank of France and the Morgan partners had other things on their minds that late summer and fall of 1929 than an overthrow of the Soviets by provocation on the Eastern front!

It is the very essence of all present-day Russian propaganda (and it must be continually borne in mind that every newspaper, every factory-sheet, every kino, every operatic and dramatic production, every radio program, and so forth, is one hundred per cent controlled from Moscow) that the present crisis throughout the capitalistic world has proven that our sociological and economic system must end and that the Soviets are soon to spread over the civilized world. What the propaganda does not dwell upon or mention is that it is just this economic crisis in the capitalistic (i.e. buying) countries that has so badly disrupted the working of the Five-Year Plan. Nor does it dwell on what a terrific loss was entailed by Russia when England went off the gold basis. It fails to mention that although there is a surplus of practically every commodity in the rest of the world, in Russia there is not even a usable surplus for internal needs after the export requirements have been met. It does not state that where the Plan had called for the exporting of one bushel of wheat to obtain a dollar in *valuta* with which to buy machinery and services under the Plan, Russia must now export two bushels to obtain the same dollar. Against this, in such manufactured goods as the Soviets are forced to import, that dollar buys only a seventh to a fifth more than it did in 1929.

A DELAY

On our first walk about the streets and through the shops of Moscow, we asked ourselves, "Where are the starving Russians we hear so much about at home?" The G. U. M. State Universal Store diagonally across from the main State Opera (Bolshoi Teatr') was alive with people buying and filled with commodities for sale. Clothing, of inferior cut and quality compared to similar merchandise here, was obtainable in considerable variety. A man's suit would be priced at anywhere from sixty or seventy to one hundred and seventy-five rubles. Women's wear, outlandish in style, of cotton or artificial silk was disproportionately expensive compared with Berlin or New York. But at least the commodities were there and could be bought by those who could pay the price.

Boots, shoes, pocketbooks, shirts, underwear and night clothes; radios (crystal sets, with here and there a battery type of our 1923 models), phonographs, cameras, films (a German firm had a concession at that time), tooth paste, soap, cigarettes, of all qualities and at all prices (the best grade selling for the equivalent of 25 or 30 cents for a packet of twenty-five)—there was everything to be had, without ration cards and at not too exorbitant prices.

Here and there we passed a wineshop, state-owned of course, where for five or six rubles, depending upon the brand, one could procure without restraint an excellent bottle of five-star fin-champagne cognac. Red and white table wines, still and sparkling, could be purchased from a ruble a liter up, again depending upon age and quality. In the foodshops, there was surprisingly little congestion, and foodstuffs were obtainable in great

variety and at nearly gold prices. On the streets, private traders were hawking fruits from the Crimea, and I remember my turning away with the thought that as a foreigner they were "doing" me when they asked thirty kopeks or fifteen cents for a pear. I was to think of that incident many times during our second trip. There were shops on the Tverskaya where one could buy delightful objects of lapis lazuli, malachite, and onyx. There were others where beautiful silver foxes, sables, fitch, and squirrel could be purchased. Still others where tempting sweets were displayed and sold without any sign of the long queues which are so typical today for even the necessities. In fact the ony queue which we saw throughout our entire first trip to Russia was in December, in Leningrad, at the store of the Rezinatrest (Rubber Trust) where such a line a block long waited patiently for the opportunity to buy a single pair of goloshes. Everywhere were good humor, pleasantries, and smiles.

Returning to the Savoy, we looked dolefully at the inoperative lift and climbed the five double flights of stairs to the restaurant which, during the period of *remont*, was located on the top floor. There we had a really delicious dinner, a creamed soup, a superb native partridge, a salad and coffee which one could recognize as such. This, with a bottle of Lafitte and a couple of thimble-glasses of vodka, came to about twelve rubles, or six dollars, which, for the both of us, was really not bad. I often thought back on those merry days of 1929, with their comparatively uninflated prices, during our later experiences.

We had breakfast in our room the next morning and again found the ham and eggs excellent and the

coffee drinkable. The check was a little less than five rubles. I reported again at Amtorg, was referred to the individual who "would know about my case," and found that he did not speak a word of English. Fortunately, he was soon joined by a Russo-American who had recently been transferred from the New York office. I found that I had to tell them on what mission I had been dispatched to Russia; also the nature of my work. They informed me they had absolutely no instructions as to when I should leave for the Urals, but that they would telegraph. The following day someone found out what it was all about, and I received a very courteous visit at the hotel. It appeared that the Trans-Siberian Express, which we must take as far as Sverdlovsk, departed four times weekly. Accommodations were exceedingly difficult to obtain, more than usually so, due to the outbreak in the Far East. This train, which ordinarily connected with the Chinese Eastern at Manchouli, now had to make the circuitous northern detour via Khabarovsk along the Amur River instead of the direct route from Karimskaya through Manchuria to Vladivostok. Due to the trouble in Manchuria, reservations had to be made far in advance, for the Express would be crowded every trip with Soviet officials, officers, foreign business men returning from holidays in Europe, students deported to China, and here and there a tourist.

I remember the strange interview distinctly. I had been to Amtorg, had strolled back to the hotel from their offices, which were then on Petrovsky, after having been assured that we should make ourselves comfortable awaiting the telegraphic instructions from the Urals. At about four-thirty that afternoon, the little friendly

chap who had met us at the station upon our arrival in Moscow knocked on the door, and without more ado entered with a stranger. After the introductions were made I learned that this new arrival upon the scene was not in any way connected with Amtorg, but had had full instructions concerning our arrival in Russia. There then ensued a conversation in German, English (the newcomer spoke quite a bit until he became excited), and jargon. But the long and short of it all was that after great difficulties had been overcome, they had procured transportation for us on the Express leaving Moscow the following day. "Would we go?" "Most assuredly."

Now, I had already noticed in picking up the sleeping-car tickets at the border for that section of the journey from Berlin which was on the Soviet lines, that first-class places seemed to be denoted by red tickets. So when our interpreter handed me the transportation, I felt a keen mental reaction to the green slips which he gave me in addition to the railroad tickets. "These are first class, aren't they?" I asked, first in English, then in German, "*Erste Klasse, nicht wahr?*" I was assured that they were. However, I noticed a guilty flush pass over the naturally pale countenance of our young friend; I must admit, however, that outside of a subconscious premonition, it failed to register. Arrangements were made to have him meet us in the morning, he to provide the taxi. We also decided that it would be foolish, in view of the fact that we were scheduled only to spend a couple of months in the Urals, to take our trunks, which contained street and dress clothes suitable for Berlin or Paris. Thereupon, as soon as the interview ended and our instructions for the following day had

been sufficiently clarified for us to understand, we dined and, immediately giving up any idea of going to the theater as planned, proceeded to sort our baggage. My wife decided to take only one suitable traveling dress; I, one business suit, sufficiently worn to make us, as we thought, quite inconspicuous; then nothing else but our breeches, boots, and the other appurtenances which we use in mining camps. These were contained in a huge English kit-bag and our linens and toilet articles in a couple of suitcases; there remained only a duffle-bag or two, a small black valise with a complete medicine kit, an engineer's carryall for instruments, etc., and the cameras.

Early the next morning, the porter took our trunks down to the storage room, we received *kvitancias* (receipts) therefor, and, awaiting our interpreter, breakfasted. Having twice broken our night's fast on ham and eggs, we wondered how we could vary the early morning diet. But there was no menu for the meal (for other meals the menu is printed in four languages), and since the waiter knew nothing but Russian we were forced by circumstances to refresh ourselves again with "ham and eggs and coffee," which English words, I have found, like "whiskey" and "bifstek," are everywhere understood.

Two hours before train time, our Russian friend entered, all excitement and hurry. "Quick, we must dash for it!" he urged. "*Warum diese Schnelligheit?*" I asked. "*Wir haben noch zwei Stunden.*" In other words, why all the fevered anxiety about catching a train which didn't leave for another couple of hours? But we didn't know Russian trains—nor Russians. To allay his mental

stress, we gathered our impediments, he phoned not for one but for several porters, and we found ourselves on the street to await a taxi which we were told would surely soon be there. After thirty or forty minutes had elapsed, by which time our patience was becoming a bit exhausted, our guide started to get busy on the telephone. It seemed he had called the State Taxi Trust, which already had a few Fords in service, and had been promised a car for the time stipulated. These taxis run on meter and are comparatively cheap, at that time a ruble a kilometer, which would have made the run to the North Station whence our train departed a matter of three or four rubles, as opposed to the piratical ten of the freebooters. Exactly one hour before train time, which means after one full hour of waiting on the curb, our friend dashed in one direction, dispatched two or three porters in the remaining ones, and eventually appeared with another Renault, even more ancient than the first we had encountered.

We made the station in short order. Again the bickering about price—this time the compromise effected was eight rubles—and again we made our Napoleonic advance through the Russian hordes to the train platform. Here we found that the train would soon be backed in. It had come from the western frontier, and was being shunted from one station to the other. We piled our luggage neatly around a pillar and assigned a porter to watch it. My wife kept her beaver coat hugged tightly to her—despite the heat of that August day and my quips about Russian honesty under the Communist régime.

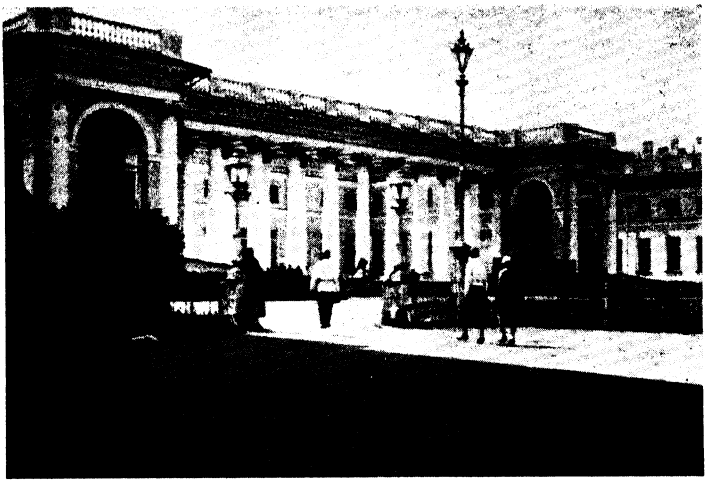
In due course our train was backed in. Our guide



A MAIN THOROUGHFARE, MOSCOW



STATE OPERA, MOSCOW. On the right the State "Universal" store. The square is named after the Communist patriot, Sverdlov



THE FORMER SUMMER PALACE OF NICHOLAS II, AT TSARSKOE SELO, NOW A MUSEUM



RAILWAY STATION NEAR LENINGRAD

told the porter the numbers of our places, and while the latter busied himself transporting the cargo aboard and placing it overhead on the ample baggage-racks of the huge cars, we were taking our farewells of the former. The three-minute bell rang. We all got aboard. We talked in the aisle, exchanging pleasantries and *auf-weidersehens*. We walked along the corridor to our compartment, our guide following us on the platform. Finally, as the one-minute bell sounded, and we had traversed the entire length of the car, we came to our numbers. But where, on all the other doors, there had been but two berth numbers, on this, ours, there were four! We opened the door, still unsuspecting—to intrude on two very obvious Englishmen from the East End of London. "Gawblimey, a laidy," one of them piped up. I shall never forget the shock I underwent when I saw that compartment, with its two parallel berths, two uppers to be let down at night, no lavatory, and the thought of forty hours of travel in it with my wife and two strange men.

I understood everything. On these *wagons-lits* cars, confiscated after the Revolution from the Compagnie Internationale, there was always a four-berthed, second-class compartment at the very end of the car, the rest of which is usually devoted entirely to the standard two-berth, first-class accommodations. We had been assigned to this second-class carriage along with the two Britishers who, by the way, seemed likeable enough chaps. I called loudly for the conductor of our car. Perspiring now with anger as well as temperature, I confronted the demoralized representative of our Trust with what must

have been a dreadful mien. Wrath, righteous wrath, burbled from my every pore.

At first I could only rant in English; then, realizing how every second saw us nearer a departure under those impossible conditions, I calmed sufficiently to break forth in really vitriolic German: "So this is second class. You knew it all the time, you deceived us. Don't you know my contract specifically calls for only first class, de luxe *wagons-lit* throughout?" And so on, with sufficient *Schweinereis* and *Dummheits* thrown in to make it all thoroughly effective. I never realized until that moment of stress just how much German I really had at my command. "*Aber*, Herr Rukeyser—we really did not know . . . it was all that could be procured . . . you are urgently needed at the mines . . . there were absolutely no other spaces to be had . . . there is no other train until Tuesday (it was then Friday). . . ." Without more ado, I passed first my wife, then all our baggage, through the window of the corridor onto the platform, and as the train screeched its departure, I followed—to the utter dismay and absolute confusion of our now completely demoralized interpreter. For a full minute I felt downright sorry for the boy. I had visions of the GPU and what not; but he soon reassured me that he had had nothing to do with the purchase of the tickets; that had been done by the office. And in full knowledge that in Russia unused space is non-returnable, and with a chuckle at the "break" I had given those two unsuspecting Englishmen, we fought our way again through the station and out onto the square.

Without speaking, we returned to the hotel. There we found that our suite had already been occupied—

or was the large, well-furnished two rooms and bath assigned us this time—a suite obviously reserved for only the highest Soviet dignitaries—in the nature of a peace offering? At any rate, there we were back again, the trunks had to be brought up from storage, and our impedimenta (the Romans knew what they were talking about when they called it that) unpacked. We looked forward to the next four days in Moscow, with nothing to do but see the city, with the keenest anticipation.

CHAPTER FIVE

A JUDGMENT FOR SOLOMON

THE NEXT few days gave us a splendid opportunity for a first-hand study of Soviet institutions, particularly these having a bearing on the sociological and cultural phases of present-day Russia; and additional opportunity to learn something about the gigantic Five-Year Plan, with which the very atmosphere seemed to be permeated, although in America it was just beginning to be discussed. But before entering upon such phases of Soviet economy and everyday life, I must relate an incident which was to be the prelude to a long and dramatic series of events ending in tragedy.

The very afternoon of the debacle over our departure, I was asked to make an appointment to meet one of the executives of the Uralasbest Trust. I immediately acquiesced. The time was set for nine-thirty the following morning, at our apartment. A few minutes after ten our guests were announced, and I was completely surprised. The official introduced to me was none other than the technical director in charge of operations

at the mines. His was a position responsible only to the president of the Trust. He would correspond to the general manager in the corporate structure under our capitalistic system. The reason for my surprise was twofold. First, I could not understand the director of operations being in Moscow without my having been informed of the fact; second, why had I been so summarily rushed out of Moscow to the mines on any accommodation procurable in the apparent attempt to prevent just such a meeting between us? The answer to the first question was soon to be obvious. The answer to the second constitutes one of the real purposes of this book.

I saw before me a man probably a little over fifty years of age—tall, stooping, thin, even slightly cadaverous in appearance, a man whose every feature radiated determination, a certain positiveness, a true stubbornness which would indicate a fight to the bitter end for such ideas as he had once made up his mind to defend. I saw also the face of an implacable adversary, a crafty, and possibly none-too-scrupulous fighter. I could not help feeling that this man possessed a fanatic's mania for the one thing in life which I immediately sensed was dearer to him than anything else—his work, his standing as a technical man. I could sympathize with and appreciate his obvious pride in the really enormous responsibilities which were his.

That he was dressed considerably better than anyone I had yet seen in Russia was immediately explained by the fact that he had just that week returned from Germany. I also learned from him that his origin, as indicated by his name, was German—his forefathers had been members of the German colony brought to Russia

by Catherine the Great. This group of a hundred thousand or so immigrants settled on the Volga and today are represented in the so-called autonomous German Republic of the Volga by over two million people. These still retain their German names and some still speak German, although, of course, they are completely Russianized in language and customs.

I sensed from the moment of our introduction a latent but very tangible hostility toward me. Here was a man with whom one could never work. Here there would be no spirit of co-operation, no matter with how much tact or diplomacy I carried on. He obviously considered me an enemy. I was positive that there was a battle ahead, that war was already being declared, and that I was destined to be a major protagonist. I also sensed that the stakes were going to be high—on my side, my professional reputation, prestige, my duty toward my clients, my future in Russia, if not elsewhere, as an expert on the subject for which I had been engaged; on his side, his position, his entire status under the system with which he must perforce live without chance for escape, possibly even his life, certainly his freedom. I realized that behind this mask of self-confidence was a shakiness, a sort of desperate bravado, as much as to say, "I've made my bed, I must lie in it. I must pursue my present course of action to the end, no matter where it may lead."

The technical director was obviously a man of the highest engineering education, training, and experience. He told me of his training in the best schools of czarist Russia, with advanced work abroad; of his years of work in executive and technical positions, in the coal

mines of the Don Basin, with private firms before the Revolution; of his work in Siberia and Germany. He was a man of long experience—in *coal.* He had been working with asbestos little more than eighteen months or so, and his experience with this mineral seemed entirely confined to the Ural deposits. I could feel, without any great play of imagination, his scorn of the idea that a man almost twenty years his junior should be called from abroad to pass upon his work or condemn it. Nor could I blame him for his evident feeling regarding me and my presence there. I remembered the scene at the Amtorg office when one of the men asked me when "my father" would arrive in Moscow, and his reactions when I politely informed him it was I with whom the contract had been made.

I must explain here the peculiarities of asbestos technique. A man may be the most advanced engineer in his profession, in the handling of metallic mining problems, and still not be as competent to design an asbestos extraction plant as some French-Canadian mill foreman who never saw the inside of a technical school. The extraction of asbestos is more of an art than a science. The deposits which constitute the world's resources in this important mineral are to be found primarily in the province of Quebec (where the first milling plants were constructed, and which, up until just after the war, supplied over 90 per cent of the world supply), in Rhodesia, in the Union of South Africa, in Cyprus, in our own country in Vermont and Arizona, to a minor extent in other states, and with less important developments in Italy, Australia, the Far East, and elsewhere. The technology has been practically entirely developed

in the producing district of Canada, and only within the last ten years have modern mills (plants for the extraction of the asbestos as fibre from the rock as mined) been erected elsewhere. Even the history of the industry in Canada has been a peculiar one. It simply grew, from a small beginning largely without trained technical personnel; its methods were evolved to a great extent by local men, most of whom had never seen the practice or developments in other technical endeavor. To this day the inherent methods have been little changed, any advances being primarily those of mechanical detail.

It is no longer a question either of a lack of trained technical operators or of a lack of knowledge; rather, the industry, since the post-war depression, has never been financially strong enough to dig its way out of certain unavoidable ruts. Consequently, a real knowledge of asbestos technology must be based upon operating experience in the Canadian field. And to complicate the problem, asbestos, unlike copper (which once it is reduced to the pure metallic state always remains copper), is not always asbestos. It is unique in that its quality plays the leading rôle in determining its value. Quality depends upon such factors as length of fibre, tensile strength, harshness or softness, silkiness, color, divisibility into microscopically fine strands, resistance to heat, iron content—in other words, upon both *physical* and *chemical* properties. No two districts of the world produce asbestos exactly similar in quality. Even two adjacent mines in the same district may produce asbestos of vastly different characteristics. This may be true even of two sections of the same mine.

Thus a technical process adaptable to one district may or may not be adaptable to the next—a mill which will make a good commercial product from ore from one mine may make "hash" out of the rock from another. Hence, the extraction of asbestos fibre from the rock becomes more of an art than a science. An engineer going to a new field to report on methods of mining and milling must first become entirely familiar with the geological and other peculiarities of that district. Above all, he must have a suitable background of actual operating experience in other producing districts. And lastly, he must at all times, during the gathering of his data, keep a completely open mind, without preconceptions before arriving at his conclusions; and from his experience build up a technique for the particular problem at hand. Thus, the reader may realize that this subject is one which is so highly specialized that no matter how splendid the achievements and technical ability of an engineer along other lines, he must at least have seen and worked with the processes involved in asbestos before he can possibly be proficient in its extraction.

So it happened that the technical director, who was a capable engineer, a man who had written authoritative technical treatises, a skilled and forceful executive, may have proved unequal to his responsibilities through no real fault of his own, but merely because of his lack of experience in this particular field. It might have happened to anyone, but hardly to one more flexible in his ideas, perhaps a younger man, not quite so set in his opinions, one with less self-assurance and less disdain for his juniors. The average young engineer in America learns more real engineering the first five years after

his graduation, and has the opportunity to acquire more genuinely practical experience with the attendant relegation of theory to the background, than has the engineer in Russia in a lifetime.

Thus, I here came face to face for the first time with the major problem of the American engineer working for the Soviets. In the capitalistic world I had been called upon time and time again, in my consulting capacity, to exercise the utmost tact and consideration. Operating personnel, living with their problems from day to day, resent the intrusion of the apparently casual consultant. The picture as a whole may escape them. But, if reports are adverse, if recommendations are at variance with the operating policies, the management or technicians will at worst undergo a loss of their positions, and usually nothing more serious happens than a censuring of those responsible for the mistakes. More often nothing happens. But in Russia things are done very differently! Here the consultant, and particularly the foreign consultant (for he is free to come or go, leave or remain, as he wishes—he is often out of the country before his recommendations are even attempted), has the fearful responsibility of knowing that his every word, every gesture, if adverse, may and usually does result in disaster to some Russian technician or executive.

For, when it comes to the technical operations under the Soviet régime, the former intelligentsia in nearly every case must be employed; as yet there is little qualified personnel from among the proletariat. I refer to those callings involving higher education and technical experience, not mere executive positions. An engineer,

at best, is born, not made. And to train one means years of education followed by more years of unlearning, through actual work, the preconceived notions he has already absorbed. Naturally, the only men really available at the present in Russia, are these educated before the Revolution. Consequently, we Americans in Russia are working under the constant strain arising from the knowledge that men's freedom and happiness, even their lives, are at stake every time we make an adverse report, or depart from policies already pursued. It is a responsibility, which, if appreciated beforehand, would, in my opinion, prevent many a foreign specialist from accepting a Soviet technical-aid contract. For it goes without saying that once we have embarked upon the work contracted, we must give our best honest opinions and make every attempt conscientiously to perform our duties without heed for the human equation—something which is, perhaps, subconsciously impossible for anyone who possesses even a minimum of ordinary human sensibility.

This, then, was a most peculiar conference. Here was the technical director of our Trust, who, according to the conversation as it unfolded, had just returned from a protracted sojourn in Germany where he had been studying mining methods (asbestos deposits being notably absent in that country) and purchasing machinery for the new *Gigant* (Giant) Mill which even then was being erected. From the questions he asked me concerning the methods in use in Canada I could perceive the serious doubts that were obviously worrying him. His face grew tense, he seemed to wince as though from some unseen blow, as we talked. I learned, during that

morning's conference, of an astounding series of Soviet blunders. I fear that the following history will lend fuel to the exponents of the school of thought which so firmly believes that the present economic system in Russia must fall, if from nothing else than the sheer weight of its mistakes. Let us not forget that mistakes can be rectified—and often are.

In 1928 I had fulfilled a contract with Amtorg in New York to lay out the preliminary designs, along generalized lines, for the proposed asbestos mill. The plans were accompanied by an extensive report covering all phases of the processes involved. I had pointed out wherein my ideas, based on actual experience with the subject, were at variance with the technical norms sent me as a basis for the drawing, ideas from which I could not depart. But disregarding such advice, without heed of consequence, a contract had been given a large German firm to build the plant. The flowsheet, or schematic arrangement of machines and processes, had been made by the engineers of the Trust under the direct supervision and approval of the technical director. This flowsheet was also contributed to by the Germans, a paltry five-ton sample of the ore being worked on laboratory scale in the preliminary testing. I was told that none of the Russian or German personnel had ever seen a chrysotile asbestos mill in operation; and yet, they had attempted to build what was to be one of the largest mills of its kind in the world. This mill—its many sections extending for well over a half-mile in length—had burned to the ground in May, 1929. I recognized the time of this disastrous fire as that during which I

had had the urgent telegrams from Amtorg to Arizona asking me if I would leave for Russia immediately. Yet, although I had answered in the affirmative, so strong is the bargaining spirit, so great the urge to save a few dollars of *valuta,* that it was finally August before my second contract had been actually signed. In the meantime, I now learned, the mill was being rebuilt—along practically original lines! And all this despite the fact that it was just such a problem about which my advice had been sought. This, then, had been the procedure in a case involving several millions of rubles and a large amount in *valuta,* i.e., import materials.

Was it a wonder that this scowling individual with the overhanging, bushy eyebrows and the harried, intense eyes, this man who, by nature of his position and by reason of personal psychology, had assumed most of the responsibility for this venture—was it any wonder that he looked upon me as his natural enemy? Let us indulge at this point in a bit of speculation. Let us suppose, for the sake of argument, that such a man, being a former bourgeois, was indeed a member of some counter-revolutionary movement. Let us suppose, further, that what had been done had not been entirely done through ignorance or lack of experience with this specialized subject. Let us suppose that he realized, or rather felt, that I had been brought over by the communistic president of the Trust in the suspicion that there was something not just quite right, something at least open to investigation!

It was a peculiar conversation. He spoke German, which I could understand well enough but spoke badly;

I talked in English, which he could understand readily but lacked recent practice in speaking. Behind the casualness, the politeness, and technical discourse, I felt some reason for not speaking my mind openly with this man, for not, as usual, "putting my cards on the table." I wanted to assure him that even though in the future work my ideas might differ from his, there would be nothing personal about it; that once we left the office, where debate might wax hot and heavy, business would be dropped and we could personally be friends. But with this man, such relations were impossible.

As I got to learn the "politics," began to understand how the system worked, and acquired a realization of the plight of the former intelligentsia, the engineers of bourgeois origin, who were forced to accept lucrative posts of high responsibility under the Soviets, I could almost have hated the work. I had come more than willing to meet my Russian colleagues half-way. He could only look at me as a potential source of destruction. As a foreign specialist with evidently sufficient reputation for Amtorg to have engaged me, I had all the cards stacked in my favor. I could understand the animosity he could not hide. Throughout all that followed he had my utmost sympathy and respect—respect for a man of courage, fortitude, and prodigious tenacity.

We neither heard from nor saw him again during the remaining days in Moscow. Nor was he to be at the mines upon our arrival. It was as if some definite force were holding him off until I had had at least a couple of weeks without his presence to see what he had done. I remonstrated about courtesy, business, and profes-

sional ethics—to no avail. I was smiled at. The subject was avoided. Courtesy and ethics in industry are a relic of capitalistic paternalism. No such weakness in the proletariat state. . . .

CHAPTER SIX

"KULTUR"

So MUCH has been written about the larger phases of present-day Soviet economy that any detailed description of the Five-Year Plan would be redundant here. But I do not believe it is generally appreciated that the Plan concerns itself not only with the industrialization and mechanization of Russia based on a gigantic, interlocking budget system; but has, in addition to the industrial and agricultural, aims that are purely sociological, cultural, even psychological. There was even a time, not so far distant, when there existed a sort of master *ratio existendi* for every phase of the Plan—namely, a political end. The entire business started, as far as I can see, with the avowed purpose of converting the entire world to Red Communism. This was the fanatical goal of the Kremlin—and possibly still is; only one doesn't hear so much about it nowadays. With this political objective in mind, the Plan was inaugurated with manifold and ingenious purposes. Above all, Russia had to become an entirely self-sufficient nation. It must, to accomplish its

ends, be prepared to feed itself, clothe, equip and defend its people; it must become an industrial entity. Hence a "gigantic budget system" for agriculture and industry with these objectives in view. But since the country had no external credit with which to purchase the necessities for the Plan (which necessities were only obtainable from the so-called capitalistic nations), the Plan had to involve, as an integral part of itself, an export as well as an import budget of commodities. This in turn brought about the necessity for a system of rationing and, concomitantly, the urge to "dump" whatever possible on the markets of the world.

Thus with the paramount aim of the plan political, the first concomitant, or, rather, means to an end, was the development of industry and agriculture. This in turn brought about the second feature, the import-export program. It was then hoped that, with these two variants successfully achieved, the standard of life in the Soviet Union could be so raised and the plight of the worker and peasant so bettered that the rest of the world would eventually fall in line. This is the present, passive course which is apparently being followed. But prior to the world financial crisis, when raw commodity prices were still enhaloed by the sky-high quotations of 1928-1929, the Commissariat for Foreign Trade found itself with a comfortable surplus in *valuta* at the end of several fiscal years. This was also prior to the year just passed when the tempo of the Plan had been speeded up from five years to four. (*Piatyletka cherez chiteri goda*, i.e., The Five-Year Plan in Four, is plastered on every factory, every public square, is implanted in every worker's mind today in Russia.)

Until just recently, the surplus in gold resulting from a favorable balance in foreign trade, instead of being maintained as a credit toward unforeseen contingencies, was to a great extent used for the spreading of Red propaganda and the active fomenting and supporting of strikes and discontent throughout the capitalistic world. Several million dollars were contributed to the striking coal miners in England and the United States. Certain incidents in our southern textile industry have to some extent been financed by Moscow. Do not think that the Russian worker does not resent such application of the hard-earned *valuta* for which he has been and is being called upon to make such drastic sacrifices. On more than one occasion I have heard worker and peasant rant about such expenditures of the Russian proletariat funds. But fiscal surpluses have been conspicuously absent the past two years, and this active propaganda in the capitalistic world phase of the Plan has probably diminished to the vanishing point.

But to return to the present, passive course of world propaganda. The powers-that-be now seem content with the idea that in creating a communistic state which shall be sociologically and culturally superior, the masses of the capitalistic states must eventually fall into line. Therefore, we find today that the all-enduring people must undergo a psychological operation. This latter is so important as to warrant special treatment in a later chapter. But let us at least indicate the former.

Leopold Stokowski, upon his recent return from Russia, was quoted by the press to the general effect that no finer opera or ballet could be found anywhere than in Russia today. He praised the Soviet musical

achievement equally highly. Those first days in Moscow, which provided the opportunity to stroll about as we would, aroused our immediate enthusiasm for what was being attempted culturally under the Soviet plan. Even to a layman, the high calibre and, above all, the spontaneity and originality of Russian opera, ballet, drama, and music were immediately obvious.

I sensed then, as I know now, that really to appreciate and understand the music, literature, and art of the Russian people one must first gain at least an inkling into their psychology. To do this, it probably follows that one must live with them, work with them, and know something of their language. And just what is the Russian theater under the Soviet régime? There is in Moscow the Georgian Playhouse, where bloodcurdlers are given in the Georgian language. There is similarly a Yiddish theater, and so on. Thus are the racial minorities catered to in this Mecca of all the Russians. But the real Soviet theater today is in my mind definitely associated with two names—those of two men who have made the effect of their technique felt throughout the civilized world—Stanislavsky and Meierhold. These two directors, with their respective disciples, have established two diametrically opposed schools. The former may be termed the exponent in Russia of the dramatic school of realism; the latter, as the very name of his theater denotes, heads what he calls the "experimental" school. To me both were equally astounding; both provocative, stimulating. With my limited knowledge of Russian, the impressionistic work of Meierhold was naturally more difficult to grasp.

The technique of the stage is a fascinating subject

to most people. If the technique is interesting, the acting polished, the subject matter may become of secondary interest. And one is usually sure to see a "different" approach and an excellent performance in the modern Russian theater.

Our first experience with Soviet drama came on the evening of my conversation with the technical director of Uralasbest. We learned from the *portier* that Stanislavsky himself was appearing in what was perhaps his most exciting and, to one without a knowledge of Russian, most comprehensible play, *The Armored Train.* We lost no time in procuring tickets. These cost seven rubles each and were practically on the stage. Unfortunately, the little old gentleman who had offered his services as interpreter was occupied, so reluctantly we departed in a droshky to see a play in a language of which we then understood hardly a word.

All entertainment in Russia, as nearly as I can make out, whether it be the opera, ballet, drama, or kino, commences at 7:30. This phase of Soviet activity seems to be the only one in which the time element is strictly observed. The performances do start promptly at the appointed hour. But they may terminate at ten or ten-thirty, or perhaps not until midnight. It appears that the Russian dramatist is not limited in the duration of his performance as he is in this country; his art may not be stifled by the desire of his patrons to hasten to the nearest night club or dispenser of White Rock. In a few instances, this freedom with respect to length may have added to the quality of the work; but in most cases it seemed to us to result in much redundancy. It gave the author that ever-welcome, to the Slavic temperament,

opportunity to harangue and discourse, bicker and debate, *ad lib.*

Promptly at the appointed hour, the last warning bell sounded, the last stragglers dashed for their seats. People dropped their glasses of tea and caviar butterbread at the buffet, and with true proletarian disregard for decorum, shoved, pushed, and ploughed their way down the aisles to their places. For in Russia, and this is true not only of the theater and opera, but also of the movies, one must be seated before the rise of the curtain, or else wait until the end of the first scene, act, or reel, as the case may be. To me this seemed a splendid idea, to permit those already seated to enjoy the beginning of the play without being penalized for their promptness by interruptions, irritating to audience and players alike.

This rule showed a funny quirk of the Russian temperament. Here is a people, notable for its tardiness and to whom the conception of time seems confined to a modernization process to be completed within four years; whose trains neither start nor arrive on schedule; whose telegrams are delivered in periods of days instead of minutes; whose business appointments are seldom, if ever, punctual; but which insists upon commencing its drama, opera, and ballet on the minute. Another idea that might well be adopted in America is the system of reserved seats for each showing of a movie—the nearer the screen the cheaper the ticket. No being herded like sheep behind ropes and a glass cage; no pompous, uniformed ushers with their pseudo-military obsequiousness; no being shunted, despite all protest, into seats a few feet from the screen. Here in Russia, the process is

reversed. If you can withstand the tedium of waiting in line a half-hour or more to buy the precious pasteboards, then the rest is easy. You go calmly, even triumphantly, to your allotted place, even though the proletarian masses in back are pushing and surging in their eagerness not to be late.

However, I am far afield from Stanislavsky and *The Armored Train.* We sat in that theater—plainly, unelaborately, uncomfortably modern in design—from seven-thirty until after half-past eleven. Four hours, understanding at that time no Russian—and never had a dull moment. The play reminded us of a good American silent film—full of action, crowded with melodrama, but superbly acted and characterized. The continuity was a bit mystifying, as some of the many scenes apparently did little to advance the plot and seemed to be interpolated for the sake of propaganda. Nothing was left to the imagination; it was stark realism from beginning to end. A host of characters, each played by an artist, superbly cast. I shall never forget such scenes as the one on the church roof-top of the Siberian village, the Reds, led by a bearded patriarch (played, I believe, by Stanislavsky himself), fighting off the approaching Whites. Nor the quaint scene at a railway station, showing the Soviet portrayal of pre-Soviet police and their methods, the bourgeois travelers, and pre-Revolutionary types. (It was in that scene that I first learned that everyone in Russia carried his own teapot and procured the necessary hot water from a contrivance manipulated by an attendant at each station platform.) Nor the scene later when the Chinese Red, in order to stop the armored train, which was thundering along with its "white

cargo," throws himself on the tracks before the onrushing locomotive to be ground to death—and, of course, halt the train for the Bolshevik attack. That scene on the railway embankment, the wonderful settings, perfect in every detail, the shriek of the self-sacrificing Oriental as the realistic driving wheels of the locomotive decapitate him—well, in any other country it would be a "ten-twent'-thirt'," but in Russia, done by Stanislavsky and the Moscow Art Theater, it was enthralling. Then the interior of the armored car, the White officer battling to the death as he manned his artillery piece and finally fell, shooting it out with his side arm—had there been one whit less perfection in acting or portrayal, only a grotesque, somewhat cheap melodrama would have resulted.

The plot of the piece was typical of the post-Revolutionary, Soviet-inspired, Soviet-written, and Soviet-censored drama. A White officer wronging a peasant girl, the righteous wrath and indignation of the virtuous Reds, the ultimate downfall of the fiendish Whites. I cannot help but wonder if the hundreds of thousands of White soldiers—I do not refer now to the officers—who now, perhaps, are enthusiastic Reds, could all have been such dreadful characters.

But it was an enjoyable and interesting experience. Equally interesting are the *entr'actes*. Hardly is the curtain down, when there begins a mad scramble for the buffet, which, in 1929, was really a most appetizing institution. Every theater, opera, and kino has one. Here, at that time, were displayed delicious sandwiches—caviar (black and red), ham, several kinds of cheese—sandwiches of every variety, costing but a few kopecks,

eight, ten, or fifteen, apiece. Antipasto, eggs, sturgeon, salmon, and other delicacies as well. No liquors, not even wines or beer, are served in these buffets. But the huge samovar, with its cheery whistle of escaping steam, provided the hot water for a glass of excellent tea from the pot brewing on its top. And there was all the sugar one could wish for—and *lemon!* But those days are gone now.

Despite the abundance of foodstuffs, the rest of the picture made the ensemble rather unappetizing. The usual malodors of unventilated rooms and stale food. The prevailing dirt and general untidiness. The tables littered with the leavings of former occupants, the counters strewn with a miscellany of rubbish, empty pop-bottles, unemptied tea-glasses, and remains of food. And with it all, the amazing excitement, the crowding, and the clamoring to be served—all bordering on a small riot. For here, and here alone, could the Russian masses get all they wanted of the comparative delicacies before them without thought of ration-cards or restrictions.

But there is still another curious feature of these intermissions at the theater. This is the custom of the promenade. In what was a sort of ballroom the audience walked around and around in a never-ending circle. No one walked alone, always in pairs—soldiers with their sweethearts, here and there a sailor with his girl, or an officer, smarter and better accoutred, with a companion whose pitiable attempt at copying a mode from some foreign magazine with materials never intended by Mr. Paquin, indicated the lingering bourgeois tastes; or perhaps a pair of aviators, even in Russia the *élite* of the *élite;* an obvious professor with his wife, artists, intel-

lectuals—these were just a sprinkling amid the sea of working people. Around and around they walked, talking and laughing, apparently oblivious of the propaganda plastered and placarded about at every turn. Streamers urged the completion of the Five-Year Plan in four. Banners exhorted the purchase of internal loans. Placards show the Capitalists dying fearful and sundry deaths at the hands of the Worker; allegorical picturings of every description and on every subject, from the Rise of The Workers of the World to the Evils of Drink, from the horrors of Social Disease to Advice on the Care of Babies, were on every side. One display, given over to the history of the Art Theater, was well-patronised and, to us, intensely interesting.

The next night at the Bolshoi Teatr' we encountered another cultural treat of the Soviet régime. The new ballet, which all Russia was then discussing, was being given. *Krassny Mak,* or *The Red Poppy,* as it is called, is possibly the best thing which has come out of the maze of Red Russian art. It is, to my mind, a magnificent ballet. The music, now reminiscent of Rimsky-Korsakov, now as modern as Stravinsky, is stimulating and delightfully adapted to the dancing. The production was elaborately mounted and the dancing splendid. For eight rubles a ticket we sat in what was formerly the imperial box of the once beautiful opera house. The place was jammed. In our box sat some ten or twelve other people—all Russians, all of the worker class. I shall never forget the intensity, the eagerness with which these obviously uneducated, humble people devoured the spectacle and immersed themselves in the music. A peasant next to me, his elbows on the faded

plush of the rail, head in hands, his beard bobbing slowly up and down as he masticated an apple in perfect synchronization with the music, seemed perfectly absorbed in the beauty of the performance. I became oblivious of the smell of the leather of his mud-spattered boots, the dingy odor emanating from his soiled blouse —I even forgot the ballet in the fascination of studying this typical member of an audience at the Russian opera. I tried to picture the former glory of that box, the splendor of the ladies, the gorgeous uniforms of the men. The imperial box! The Czar of all the Russias! The all-powerful, the despotic, the magnificent, the autocratic master of a hundred and fifty million human animals. I remembered how even I, an American, as a child had felt an inward quake at the mention of the Russian Czar, the most unapproachable and absolute of all modern monarchs. And here we were sitting in his box, perhaps in his very seat. How the shade of the last of the Romanovs must have been revolted by the simple but dirty peasant munching an apple in the imperial box!

A great light began to dawn upon me. As I stirred to the rhythmic cadences of endless Chinese coolies stumbling with their prodigious burdens down the gangplank of a Soviet ship, the Mandarin overlord punctuating the tempo of the ballet with the lash of whip against human body, there came to me the realization that here was history—living history. And I was watching it. Not reading about it from the sidelines, but living it! I had but to reach over and I could even touch it. Before me was a new kind of czar, who, multiplied by one hundred and fifty million, spelled a new order of things. And I realized something else. This lousy boor beside me was

a human being; he liked the same things I liked, the same things the Czar of all the Russias had liked; he was equally stirred, in his own way, by the music, by the beauty of the dancing, by the allegory of the little Chinese girl, the Red Poppy, who, as the symbol of this new order of things, was undergoing all sorts of hardships at the hands of an unsympathetic society.

And then I realized the power of Soviet propaganda! I swore at myself for a sloppy sentimentalist. But the thought lingered in my mind: "If I, with all the advantages of education, feel myself, even for a moment, encompassed by this insidious propaganda of music, dance, and spectacle, what must be the effect upon these ignorant masses?" Here, surely, was food for thought. This was a something which could not lightly be dismissed as superficial and ephemeral. As I looked down upon that once beautiful theater, with its now shoddy carpet, its woeful lack of paint, but above all, upon that crossed sickle and hammer now replacing the imperial crest, I wondered upon the effect of all this upon the twenty million adolescents soon growing to adulthood who would never have known the Czar, never have remembered life as it was; to whom the War was merely history and the Revolution something to be read about in Soviet history books? To these twenty million Young Pioneer boys and Komsomol girls, all that such things would represent was what the Academy of Music on Fourteenth Street or our own Civil War meant to me. These youngsters hated that now half-mythical background as much as my schooling in the North had taught me to hate the slavery of our South. Our Yankee textbooks gave us a very one-sided picture. *Uncle Tom's*

Cabin was the gospel by which the institution of slavery in the South was condemned. Such is the power of propaganda, such the source of the Catholic boast: "Give us the child until he is sixteen; you can have him after that." And these twenty millions in Russia will soon be sixteen.

I tried to imagine an American farm or factory hand at a performance of *Le Coq d'Or* at the Metropolitan, sitting in the diamond horseshoe, chewing gum, and staring uncomprehendingly at the performance. I tried to imagine him liking it, and thought of his probable comments. I gave up thinking and relaxed to a full enjoyment of the ballet. . . .

CHAPTER SEVEN

THE TRANS-SIBERIAN EXPRESS

THERE IS something about the Trans-Siberian Express which appeals even to the most prosaic imagination. It is unique among trains. It is an institution. It starts its journey of over five thousand unbroken miles in Central Europe. It traverses the fields and forests of European Russia. It touches the oldest and most historic cities of that vast domain. It climbs the gradual, undulating slopes of the Urals; crosses over the height of land dividing Europe geographically from Asia; and winds down through the forest-covered eastern slopes of these mountains and out onto the fertile steppes of western Siberia. For days after it journeys across these steppes, ice and snow-covered in winter, golden with wheat in late summer. Eastward it continues through the "twilight" nights of the northern summers and the few short hours of daylight of the winters. Tartars, Bashkirs, and Mongols crowd the platforms in turn to watch it pass. Finally it starts on the last lap of its eight- to ten-day journey, across the wild and rugged country of middle

Asia and into the Far East. It covers an entire cross-section of human history.

After several days of sight-seeing in Moscow, we left for the Urals. This section, geographically Asiatic, politically administered as a part of the European section of the Soviet Union, is on the dividing line between what is psychologically occidental and oriental. The merging of the Great-Russian type with the Mongol here first becomes distinctly noticeable. Formerly, under the Czar, this district was a portion of western Siberia. Under the Soviets it became a separate administrative region, or *Oblast* as they call it in Russian (nearly equivalent to the German *Gebiet*). It can roughly be likened to the structure of one of the individual states of our own Union. The capital city is Sverdlovsk, named after a great communist leader. Formerly it was called Ekaterinburg. Here the Czar and the Czarina, their son and heir, their four daughters, their lady-in-waiting, and the imperial equerry were all shot to death. Here the Five-Year Plan for what is probably the richest potential district of the Soviet Union is administered. Here we find the District Council of People's Economy functioning for the Urals much the same as the Supreme Council in Moscow functions for the entire country. Locally, this ultimate arbiter for the economy of the Urals is known as the "O.S.N. Cha." (in Russian O.C.H.X.), the *O* standing for *Oblast,* or District. It must, of course, coordinate its efforts with the Supreme Council in Moscow. But it has the right of strenuous objection; it can even overrule Moscow where its own development is concerned. So important is the Ural District, so rich in natural resources, so centrally located in respect to the

entire country, so sheltered from foreign invasion due to the distance from the country's borders, so complete is its list of potential industries, that a special Five-Year Plan has been evolved for it. It has an ultimate Plan all its own. In addition to the funds provided under the normal workings of the Plan allotted to this district, there has been made, in addition, an appropriation which I was told on good authority exceeded eight hundred million rubles for intensive development here. The theory is that with the Urals' potentialities developed—in iron, coal, heavy industry, copper mining, platinum, gold, foodstuffs, factories, textiles, and so on—the Soviets, should they ever meet defeat on a western or eastern front, could retire to the Urals, re-equip and feed their troops, and hold out indefinitely. The invader would probably repeat Napoleon's Pyrrhic victory.

No roads act as feeders to this district. Only the single-track ribbon of steel of the Trans-Siberian contacts it with the outside. Once a retreating army destroyed this slender thread of communication, invading troops would indeed have a difficult time of it. And the two thousand to twenty-five hundred miles or so from the nearest frontier would present a formidable problem to even the most advanced type of aircraft.

With the fiasco of the previous week still fresh in our minds, our guide had no difficulty in persuading us to start for the train a good two hours in advance. These were the days before the Russian transportation system had suffered the severe breakdown of this past year and a half. At the termini, at least, trains departed fairly promptly on schedule; even arrivals were not unduly late. Once again we found ourselves safely ensconced

upon the platform, this time awaiting the train to be backed in previous to its departure. Our little friend, the interpreter, hovered near the pile of baggage. The porter, mopping profusely, also kept an eagle eye thereon. I could see the brown tunic and brilliant red tabs of a station GPU at the end of the platform. I again chided my wife for hugging to her, despite the heat of that late summer day, her winter coat.

We strolled to the end of the platform to watch the inspection of the passengers' tickets. We noted that no one was allowed through the gate without either transportation or a special platform ticket costing, as I remember it, four or five kopeks. We strolled away again, this time looking out over the rails, watching with interest the workers who were busy with the electrification of the trackage. Our guide joined us.

"Herr Rukeyser," he said, "this is the second electrification of the railway system to be achieved in the Soviet Union. The first was in the oil fields of the Caucasus, at Baku. The system is being installed under German supervision, with German technique and German equipment. The latest type automatic interlocking switches are being used. The overhead system is also typically German, high-tension, alternating current. The rolling stock is being made in Russia after German patterns and models. The equipment will closely approximate that of the Berlin *Ringbahn*—high speed, side-door, multiple unit cars, equipped with the last work in pantagraph development. Several improvements have been developed by us here in Russia. This will constitute one of the finest suburban services in Europe."

In the interim our train had been made up and was

taking on passengers. The platform had come to life. An Englishman was having a time of it at the gate. Something had gone wrong about his transportation. A through passenger to the Far East, he naturally had no interpreter, and it was obvious from the violence of his gesticulations that he knew no Russian. The GPU officer had entered upon the scene and was trying first German, then French, both without avail. Without wishing to intrude, I felt that possibly my guide and I could be of service. The look of relief and gratitude which swept over that poor chap's face more than repaid our efforts. The station master would speak to the GPU officer in Russian. The latter would repeat the conversation to our friend from the Trust, also in Russian. This would then be repeated to me in German, and I would relay the message to the thoroughly distressed Britisher in English. But the long and short of it was quite simple. His railroad ticket was quite in order for this train. His sleeping accommodations were for next Thursday's. With unctuous courtesy, extreme regret, but absolute persistence, the now thoroughly desolate Englishman was made to understand that he could under no circumstances take that train.

"But for Heaven's sake, tell them all my luggage has been checked on this train right through to Vladivostok! I have nothing with me but this attaché case. If I don't get aboard today, I understand I can't get transportation for another week!"

But nothing could be done. The GPU went with him to the ticket office. They crowded past the line extending a good hundred feet from the window—for tickets are only sold for each particular train at train time—but

again to no avail. Nothing but the hard third class which, without food (third class can't use the dining car), without opportunity for even washing—well, on a trip which might last ten days, this was obviously impossible.

At the same time, precisely the reverse was happening. An American professor, returning to the American University at Hongkong after his summer's holiday, had arrived at the station with his transportation in perfect order. And typical of Americans accustomed, as we are, to the nearly perfect service at our terminals, he had arrived about five minutes before train time—only to find no trace of his baggage. The patient GPU, ever wondering, I suppose, at the antics of these foreigners, took down all the particulars and promised the skeptical professor that his luggage would follow on the next train. It is interesting to note here that in a postcard which we received later from Hongkong, he told us that his stuff had indeed arrived on the next train, meeting him at Vladivostok where he was still awaiting a boat to take him to Japan. Which proves my contention that the GPU are the most efficient of all Russian officials.

We returned to where our car was standing. The first warning bell had sounded, we were taking our leave of our guide, again going through the long formula of thanks, appreciation, etc., which, though sincerely felt by us, had lost something of its spontaneity by this repetition and anticlimax of second leave-taking. Our baggage was deposited in the compartment. We entrained. We made sure this time that our transportation was in order. We commented most favorably upon the larger compartment (much larger than ours, due to the wider gauge of the Russian trains), its cleanliness and com-

fortable arrangement of facilities. The one-minute whistle blew. Bells were ringing vigorously. I finished checking the disposition of our luggage. All pieces were present and accounted for. My wife finally disposed of the beaver coat upon the rack, I saw my weatherproof safely beside it, when—I missed my one and only winter coat! Frantically, we searched that compartment high and low. Panic-stricken, our guide searched the platform. The porter had been paid and had disappeared. But he had taken the worker's number. His was the responsibility. The now thoroughly overworked and overwrought GPU came dashing up. "No stone would be left unturned. The porter would be stripped of his shield. The coat would be returned." I wondered to myself how the deuce the poor porter could be expected to watch some ten articles of baggage on the platform while he was dragging some other eight pieces into the car and depositing them. I realized with relief that he was a worker, a very humble worker, and that he was inviolate. Nothing could or would happen to him, no matter how irate the GPU officer became.

That was the end of the matter. We neither saw nor heard of the coat again. The incident was truly closed and forgotten. I envisioned a winter in the Ural mountains without an overcoat, while some Moscow proletarian walked the *ulitza* bedecked in a double-breasted Chesterfield made by Burberry.

But I had learned by lesson. They warned me that at station stops en route, even the car windows must be closed, for thievery was so common that as the Express stopped at stations some clever fellow would thrust in a long hook, and take piece after piece of baggage right

out of the compartment under the unsuspecting passenger's very nose!

With a shrill blast of its funny whistle, with a grinding of drivers and hiss of escaping steam, amid the cries of farewell of the four-kopek ticket holders, and amid wishes of *Kharoshia Daroga* (*bon voyage*) from the little chap who had been so friendly and patient with us in Moscow, we jerkily pulled out of the station with ever-increasing speed.

We were off for the Urals!

CHAPTER EIGHT

EN ROUTE— AND A CONVERSATION

THERE ARE only a few trains in Russia boasting the *wagons-lits* of the Internationale type. These were confiscated from the French company of that name after the Revolution. None have been built since. The same applies to the dining cars. Naturally, the Trans-Siberian Express includes this type of equipment. So do all the trains running between Moscow and the western border points. There are a couple of the Leningrad-Moscow trains which have one or two Internationale *wagons* attached. And I have been told that the train running from Moscow through Rostov-on-Don to the Caucasus includes such a car but, I believe, no diner.

In addition to three or four of these cars and a former French dining car, the Trans-Siberian Express has several of the "soft" type of Russian sleepers. These carry four berths to the compartment and have no lavatories, except at the end of the car. They, as well as the "de luxe" equipment, have a musty, stale, disagreeable odor

which no amount of window-opening ever seems wholly to dispel. They carry a porter to each car, who is in reality the conductor in charge, who takes the tickets from each passenger and sees to it that the attendant makes up the compartments for the night and tidies them in the morning. Sometimes these attendants know a little German or French, rarely any English. Nearly always they are surly, seeming to resent the presence of foreigners to whom they are still menials. It goes without saying that the attendant is probably a member of the GPU, and woe to the traveler who, through ignorance of the law, happens to take photographs either from the car window or on the station platform. It is strictly forbidden to take pictures of any phase of the transportation system, a restriction due, obviously, to military considerations. This also applies to all fortified places and to various special buildings, such as those within the Kremlin. Anyone going into Russia should procure, either from Intourist or at the border, copies of the law regarding the taking of photographs within the Soviet Union.

The working-out of the cost of railway transportation in Russia is almost a problem in calculus. First, there are two classifications—"soft" and "hard." The soft is not so soft, and the hard is very hard. The hard class of travel constitutes the lowest and base rate. It is quite cheap and was, at the time we were in Russia, approximately one and a half kopeks a kilometer. This would come to between a cent and a quarter and a cent and a half per mile. The soft classification seemed to me (as nearly as I could work it out) to be from double to triple this base rate. It was difficult to calculate, for the only

soft cars I saw were the so-called "second-class" sleeping-cars, and for even short journeys of an hour or two, when one was fortunate enough to be on a main line where such equipment was available, one had to pay for the sleeping car space also. Thus it was that traveling "hard" from Sverdlovsk to Bajenova, a distance of 56 kilometers, the cost was formerly only about 75 kopeks. This, during the past year, was doubled. The rate on a "soft" car was, as I remember it, over four rubles fifty!

In addition to the "soft" rate, one had to purchase sleeping-car space. To this is added a special charge for linens, blankets, etc. On top of all there seems to be applied a tax or two, possibly a service charge. Then, the type of train on which one travels must be considered. There are three categories, "slow," "fast," and "express." Theoretically, the slow trains are supposed to average 30 kilometers per hour (something under twenty miles), the fast trains about 40 kilometers (about 25 miles), and the express 50 to 60 kilometers, or, perhaps 30 to 35 miles per hour. And that is certainly the maximum that the roadbeds in Russia will allow. Even at these exceedingly low speeds, wrecks throughout the length and breadth of the Soviet railways are so frequent and commonplace that they no longer excite comment. Only between Leningrad and Moscow can one find a moderately fast train service; between these two major cities—barring unforeseen but usual delays—the best train will average nearly 40 miles an hour. Or at least the schedule calls for that speed.

The cost of the ticket also depends on the class of train used. Thus from the above we see that the nominal

price of the ticket is based on "hard" cars and on a "slow" train. So, on the Trans-Siberian Express, one pays extra, first, for the "soft" accommodations, second, for the "express" feature, and lastly for the sleeper, linens, "commission," and so forth. With all that, the sum total did not seem to us excessive. The distance between Moscow and Sverdlovsk, whither we were now bound, as nearly as I could compile it from the guidebook, is approximately 2,200 kilometers, or nearly 1,500 miles. I have kept the sleeping-car receipts for the trip—it antedated the two 25 per cent increases in all fares made in 1930 and 1931. The "soft" accommodation cost (in addition to express tickets) 8 rubles 30. The sleeping accommodation (a berth in the first-class, two-berth compartment, with lavatory between each two compartments) cost 31 rubles 50. The linens cost 2 rubles, the *komissii* 1 ruble 25—a total of 44 rubles 15. As I remember it, the railway ticket was about 55 rubles. So the entire cost of transportation on the best train for something less than 1,500 miles (requiring 39 hours, or two nights and a day) was approximately 100 rubles, or $50. Thus in 1929 the total cost per mile, with sleeper, was three and one-third cents. Today, it runs to nearly five cents per mile for this class of train and accommodations.

Another peculiarity of Russian trains is the very slight difference in the cost of first-class and second-class accommodations on the same train. The former always refers to the "de luxe" or Internationale type of car, as the Russians designate the rolling stock taken over from the former privately owned sleeping car company. These have but two berths, the upper being at right

angles to the lower, and parallel to the direction of motion. The second-class compartment (there is one such on each of these cars) has four berths, all at right angles to the tracks, no lavatory facilities connected, and unless one is fortunate enough to be able to buy all four "places," very cramped and disagreeable indeed. But it is very rarely that one can ever find the second-class accommodations available in these Internationale cars. They are practically always reserved for the lesser dignitaries of the Soviet Trusts, who do not "rate" first-class accommodations; the mere traveler is relegated to the second class of the Russian cars, which have no other type of accommodation, where he is likely to experience interesting, if uncomfortable, adventures, of which more later, when I recount our own experiences on Russian trains. But it is the third class, "hard" and "slow," to which I must really devote considerable space in a later chapter. This last is typical of Russian travel today; it is the way the people—the masses—travel, and most trains are almost exclusively of this class.

But to return to our personal experiences. As we were getting settled in our compartment, the car conductor, or porter, as I suppose we would call him, took our tickets, asked us in broken German if we would like tea, and, upon our answering in the affirmative, left us. We naturally thought he would go up to the diner and be gone some little time. But he had no sooner disappeared than he was back, with two steaming glasses of tea in silver holders and a little package of tissue-wrapped zwieback. Two lumps of sugar were in evidence on each saucer. This feature of the service was soon to disappear entirely in Russia, for in 1930 sugar ceased to exist as

a commodity. It became one of those luxuries doled out only to the privileged foreigner, and ever so occasionally to the workers, on the strictest ration basis. I started to pay him, but he stopped me, indicating that I should settle at the end of the trip.

But my curiosity had been aroused as to how he had produced the beverage so quickly. I followed him out to the end of the car. Here I found first, that he had his own compartment (no catching a wink of sleep now and then in the lavatory, as do our less fortunate porters); second, that each car, directly at the vestibule, had its own samovar! This was kept going continuously and one could procure a glass of tea at all hours of the day and night. We were soon to learn that the Russian has entirely different eating habits from ours. When he first arises, at eight, or whatever hour it may be, he immediately calls for his glass of tea, with, perhaps, zwieback. He then "breakfasts" at, say, eleven or twelve. He dines at four—no later than five—and has what corresponds to an English "tea" at eight or nine. I also later learned that ordinarily the Russian "drinks" only with his meals. Cocktails or highballs before eating are an unknown custom. A mouthful of food must be washed down with vodka or wine, as the case may be, which may account for the really enormous capacity for liquors for which the Muscovite has justly won fame.

By the time we had settled down in our compartment and drunk the tea, the train had emerged from the closely built Moscow suburbs well into the open country. It rocked along at a steady pace, the clouds of dust, some of which filtered in even through the double windows, the lurching and pitching, all testifying to the

deplorable condition of the roadbed. The old wooden car was squeaking in its every joint. But we noticed with satisfaction that the compartment was in reality quite clean and comfortable. I must remark again at the size of those Russian cars due to the extremely wide gauge of their trackage. The standard American and European gauge is 4 ft. 8½ in.; that of the Russian railways is a trifle over five feet. Due to the extra space between the rails, the rolling stock can be made considerably wider and higher than ours. The result is that compartments are not only much roomier and berths longer; they are also much airier and provide a great deal of room above for luggage.

The reason for this wide gauge was later explained to me. It seems that the first railway in Russia was commenced only comparatively late in the last century. The Czar and his advisors, in view of the possibility of military attack and invasion—and evidently remembering the fact that Napoleon was beaten through his inability to establish communications—decided to make the gauge different from that of their neighbors. A gauge wider than normal was possible because the flat topography of Great Russia required little or no tunneling which, if frequent, would have greatly increased the cost of construction, due to the increased height and width of the rolling stock. But, later, when it came to building the Trans-Siberian and the roads in the Far East as well as through the Caucasus, the added difficulties in building the lines were sorely felt. After the War and the breaking-up of the Russian Empire into Poland, Latvia, Finland, Esthonia, Lithuania, etc., the new countries adapted the standard gauge. The result now is nothing

short of a freight-handling chaos at the Soviet borders. Everything must, of course, be transhipped at these points, exports as well as imports. This constitutes a major reason for the present breakdown of the transportation system under the increased tempo of the Five-Year Plan, particularly true during the winter months when all ports excepting those far to the south on the Black Sea are frozen up. Nor do I believe that with modern track-laying machinery, the wider gauge affords much military protection. The Germans, during the World War, had little difficulty in relaying one of the two rails to conform with standard gauge as the offensive advanced. Had the Russian gauge been narrower than standard, the story would have been a far different one. For then bridges, tunnels, and other features of the right of way could not quickly have been made to accommodate the wider clearance of the locomotives and cars. But it is practically impossible to change the entire system at this late date, nor have the Soviets made any attempt to do so. They have a bad heritage and they must make the best of it. The increased cost in construction of new trackage, the higher maintenance charges, the more costly rolling stock, and the increased difficulties in keeping up roadbeds always will, in my opinion, militate against the efficiency of the Russian railroads.

Later, in the dining car, we looked about us with much interest. Outside of the American professor returning to his college in the Far East, we saw no one who looked English or American. There were several Soviet military men who, we assumed, were bound for the Manchurian border (we had heard during the past few days in Moscow that the affair over the Chinese

Eastern had climaxed into a severe situation). It is rather humorous to think back to that summer of 1929 when Russia was practically in a state of war with China over her Manchurian rail interests, where now, in 1931, she is said to be going to China's aid against a Japanese threat in the same zone of influence! There were a couple of obvious Germans, engineers likewise bound for the Urals. The only other foreigners whom we could recognize as such were three Scandinavians going to the East on business and several Orientals evidently hastening home before the diplomatic and military situation should become too tense. The balance of the passengers who, like ourselves, had congregated in the diner not only to eat, but also to observe their fellow travelers, were Russians of the executive type—directors of trusts, engineers, members of commissions, and economists.

A very pleasant-appearing man was seated alone at a table accommodating four. As we hesitated, undecided where to sit, he arose, bowed courteously, and in excellent English asked my wife and me to honor him by joining him. This we hastened to do, eager to have the opportunity of conversing in our own language again and sensing the possibility of learning something of value from a person of obvious intelligence and culture.

He introduced himself to us as Boris Sergeivitch Blankov (the family name is fictitious), an economist with the Railway Commissariat in Moscow. We in turn told him who we were, where we came from, and our business in Russia. The menu which he passed to us was printed in four vertical columns—it was a veritable book—and under the respective columns were the Russian, German, French, and English equivalents of the

dishes. We made up our minds then and there to purloin the menu. During the remainder of our stay in Russia it constituted our most reliable textbook-interpreter on the subject of foodstuffs. Since at that time we could neither read nor pronounce Russian, we had to make our selections from the English column, then run across to the Russian column, and vigorously point to what we hoped and believed to be a true Slavic equivalent. On the whole the translation had been done not too badly, although we experienced some amusing surprises.

Here and there among the items listed—the list itself contained everything imaginable in the way of food and drinks—there appeared an occasional figure in ink. This was the price—or had been at some time past. Only those items followed by a price was there a reasonable chance of procuring. The balance and by far the major portion of the list must have been printed in anticipation of the successful completion of the Five-Year Plan.

We ordered beef *à la Strogonov*, some canned peas from the Crimea, a cucumber and tomato salad, coffee, and a bottle of wine. In those days of comparative plenty, the dining cars had the most well-stocked larders to be found in the Soviet Union. The reasons for this were obvious. Firstly, these cars were used by a large percentage of foreigners, which meant that the receipts were in *valuta*, or at least in rubles which had been given in exchange for gold at the fixed bank rate. Secondly, these foreigners must not be permitted to see any lack of what to them must be necessities, even though they appeared to the Soviet powers-that-be as luxuries. And thirdly, the Russians themselves who, by force of business, must use these trains must be led to believe that

any shortage which they might at that moment be experiencing on the home "front" was not a general but a purely local condition. They must be impressed with the attainments of Soviet economy. We found the beef tasty, although the manner of preparing it was rather rich for our simpler American taste, the peas rather reminiscent of the can and the preservatives used, the salad good, and the coffee, served in a glass, very much like our cereal beverage with a bit of chicory thrown in. The wine was excellent. The cost for both of us was a few kopeks over eight rubles.

We thought back to the delicious *table d'hôte* of the German and Polish railways, with its insignificant cost; we thought of the immaculate linens and compared them with the soiled tablecloth now spread before us; we looked at the china, some still bearing the emblem of the Compagnie Internationale, others with the crossed sickle and hammer of recent Soviet manufacture; and for the first time began to have serious doubts as to what was really going on behind the scenes in Soviet Russia. To us these blank spaces in the menu betokening food which might have existed at some prior time, these soiled table linens, these painfully obvious attempts to maintain a "front," these minor, apparently unimportant details seemed to typify the entire socialistic experiment. They betokened at least a mental attitude; they spelled to me slovenliness, lack of discipline, lack of co-ordination, lack of organization. A striving only to create an impression of plenty and well-being—a grand-stand play to the gallery.

We persuaded our companion to join us in another bottle of wine. The car had thinned out. There was no

one around us. The dining car conductor (also, undoubtedly, an agent of the GPU) had commenced his ample meal at the other end of the car. Blankov started to talk.

"I need not tell you, Mr. Rukeyser, how anxious I am to hear about the outside world. I was in New York, just before the States came into the War. I inspected munitions in your country for the imperial armies. When the Revolution took place, I could have remained there; but to have done so would have spelled disaster and death to all my beloved ones in Russia. I had no other alternative, therefore, but to return home. Tell me about New York. Is it true that you are building skyscrapers that are actually dwarfing the Woolworth Building? That you have shower baths, stenographers, telephones, stock-market reports and all such on some of your trains; that there are twenty-five million automobiles on highways that are paved from coast to coast; that you have nearly perfect all-electric radios practically in every home, while here we are still tinkering with crystal sets and earphones; that you have over thirty million telephones; that you can call London or Berlin or a ship at sea and talk as though the party were in the same room? Is it really a fact that Mr. Ford turns out eight to ten thousand cars a day?" and so on.

Russians of all classes are given such data with great accuracy and with no attempt to aggrandize Russia. Purposely, it appears, they wish to have the masses learn what *Amerikansky tempo* really embraces. To Americanize Russia—that seems to be the objective. Therefore tell the people how far ahead technically America still is; point out what remains to be done; give

them the truth, at least in respect to industrial development. But in regard to social, political and religious questions, I could see the hand of Red propaganda keeping the truth back, or sopping Russian curiosity with half-truths.

After I had assured him that, in the main, this technical development had indeed taken place, he was truly amazed. "Then it must be equally true that while the industrialists are thriving, what we hear of the oppression of the masses is actually a fact! It must be true that the Ku Klux Klan dominates your government, elects your presidents, metes out your justice, passes on your people's religion, and on their morals! Your Negro race must be insufferably maltreated; we are told about that every day in our newspapers and our magazines! We hear all about the hypocrisy of your forty-seven different divorce laws; that a person remarried in one state of your Union is a bigamist in another; we know all about your gangsters, your farcical 'prohibition,' your organized crime, your lynch law, your bootleggers buying protection from politicians, even from the police; we know about your gilded ladies, the gambling and speculation you Americans are prone to call 'big business'; your . . ."

But here I stopped him. "Before letting you go farther, am I to understand you are a party member—a Communist? I rather thought from your war experiences, your obvious background, and the general tenor of your first remarks, that your sympathies, at least, were bourgeois rather than socialistic?"

"You are indeed correct in your surmises. I come from the petty aristocracy; I have seen and known that

phase of life—not only here in my own Russia, but have enjoyed life at its best in most European capitals. I have nothing, absolutely nothing, left of all that we formerly thought essential for life and happiness. I am not a party man, nor could I become one should I so desire. My family's history is too bad. And for me to become a Communist would be nothing short of rank hypocrisy—I have far passed middle age, and am steeped in the traditions of yesterday.

"No, Gospodin Rukeyser," he lapsed unconsciously into the former mode of address, "I have no reason to be happy in the present state of affairs. I have a job, as you in America would call it, nothing more; a fairly interesting job—it is an exacting one—it keeps me going ten, twelve, even fourteen hours a day. I am so exhausted at night that the tiny quarters which my wife and I are allotted seems like a veritable palace to me, so hungry that our meagre fare at least fills the void. There is little hope for our class of people—nothing to look forward to, no future. I have today only the love and devotion of my adoring wife. We both have the typical 'Russian Heart'; nearly all of us are slowly dying of some form of angina—malnutrition during the civil wars—danger, constant fear, exposure and now the day-to-day dread that every moment will see the GPU at our door to drag us into some new torture and, finally, to our death. No, my dear fellow, I am making no brief for Communism; but, on the other hand, I am not antagonistic to the present régime. They have a difficult row to hoe; they are doing their best.

"Only seven or eight years ago over five million souls perished in a single year from famine and disease;

today there is order out of chaos, already one sees factories springing up everywhere and fields ripe with wheat; hears the blows of the axe in the forest. What is being done is being done for the good of the masses—the one hundred or so million dogs, some of whom my grandfather used to give to his mistresses as a New Year's gift, whom he used to flog for laziness and who mattered to him less than his cattle. No, we former upper-class Russians brought our present condition entirely on ourselves. The thinking ones among us saw the reaction in the air, knew the inevitable would happen. Now it has—we must make the best of it. We must help our present masters build a new and greater Russia, a new Russia for our children who will be the children of the proletariat. After all, the history of a nation is not measured in terms of five years, nor ten, nor twenty-five. It is measured only in terms of generations and centuries. The decadent Russia of the past is dead. The present is perhaps superficially worse for the few; but probably better, in the long run, for the majority."

I let him continue to the end without interruption. He really was not addressing me at all—rather, he was musing to himself, debating rather than making statements; trying to overcome his natural Russian pessimism with that newly infused official optimism of the Kremlin.

"But, Tavarish Blankov," I purposely reverted to the "Comrade" form in present use, as "Mister" sounds so strangely when coupled with a Russian name, "are you really led to believe over here that our Negroes are so badly treated in America? Don't you know they attend our best universities, lectures, concerts, theatres; that they earn huge salaries on the stage; that they own

restaurants; that many ride around in expensive automobiles; that they have complete political enfranchisement, and so on?"

Blankov smiled deprecatingly. "I don't doubt you, but just look at last night's *Pravda*—look at this cartoon; it speaks for itself." He unfolded the newspaper to the front page. There, in the most conspicuous position, a boldly done, striking cartoon showed an unmistakable Uncle Sam waving the Stars and Stripes over the figure of a Negro lying prostrate under his heel. I nodded and tried to repress a smile, thinking of the real condition of the colored race in the United States.

We continued our little debate. I pointed out that in some respects what he had learned of America was essentially correct. But I laughed off, as Mencken would have, I believe, as pure "Americana" most of his indictments, and thanked Heaven that, for example, childish grown-ups running around in nightgowns and burning things in effigy constituted but a small proportion of an otherwise quite sane population.

But I must admit that I experienced an underlying sense of shame, for I had already found, in more than one country abroad, that these ideas about us were not confined to Russia. Our own newspapers have succeeded in making us in many ways the laughing stock of the world. It has always been my contention that the ballyhoo which attended the May Day demonstration of the Reds in Union Square in 1930, when our own Mr. Whalen personally led the city's finest into the fray, when the papers, even the *Times*, gave over page after page to illustrations; and when a female Red, wishing to impress the masses back in Moscow that the capitalistic police in

New York rode down defenseless women like the Cossacks used to do in the Kremlin Square, hurled herself, purposely and with malice aforethought, before a mounted officer's horse in full view of the movie cameras, was exactly what the Communist Party craved. They realized they were getting a million dollars' worth of publicity for nothing.

The train wound slowly, rockingly through the night. I beckoned the waiter. We had finished our bottle. I called for cognacs and more of the so-called coffee. Blankov continued: "Something of good will undoubtedly come out of this experiment eventually. I am not referring to the economic and industrial side of the thing—that we take for granted. I mean politically, sociologically. Perhaps we are but fifty years ahead of the times. People scoffed at the American Revolution. A handful of damned fools, the entire world thought them. Then people pricked up their ears and took notice when the French turnover happened but a few years later. Republicanism had indeed been born. Even I, brought up strictly—a true believer in the days before the Revolution—can see that the Church, as it was in Russia formerly, was but part and parcel of the State—was, in fact, the System itself. The Czar was the Little Father, is it not so? The Czarina was a mystic under the complete spell of an abandoned, erotic, hypnotizing *roué*. The Kremlin is trying to teach the ignorant and superstitious Russian peasant to go out into the fields and use tractors, fertilizers, proper seed, irrigation and hard sweat, where previously the local priest would invoke the fertility of the soil by sprinkling holy water. Those were the days of the Black Hundred, when po-

groms and massacres were instigated, even led by the clergy. I can well understand, then, the abolition of the priesthood as a force in this country. The Church in Russia was a political machine rather than a source of spiritual learning. It kept the people in line by the use of superstition, mysticism, and discipline. Its religious character was an excuse—the means to an end.

"Then too, take our present penological system. I am not now referring to the crime against the State. That is the ultimate crime today in Russia. I mean the treatment of the criminal classes. They are not treated as social lepers. They are rather handled much as sick and wayward children. Their mental perspective and psychology are analyzed. Are they habituals? What is their heredity? Was their act the result of an isolated temptation, or, perhaps of the *crime passionnel,* or was it due to drunkenness or narcotics? And so on. Then they are 'treated' accordingly. The results—and I have studied them as an economist—are amazing. The new prisons, if you can call them that, are the last word in an attempt at scientifically curing rather than punishing. But then the Russian temperament is different from yours.

"Take the divorce laws—the easy marriage, quick divorce. Two rubles—a postcard to the other party who may not even know of the husband's or wife's intentions —and the knot is severed. Let us examine the theory back of it. We Russian sociologists feel that for two people to share the same bed—to live and work together —when they no longer love—that and only that is unmoral. There is no alimony, with all the attendant blackmail, perjury, and scandal. If the woman wants rights

equal to those enjoyed by man, she must take the bad with the good. Over here, if she is healthy and able to work, there is no support from the divorced or divorcing husband. If there is a child, the two must support it equally. If the parents cannot, the State will, and does. If the wife is ill or cannot work, the husband must then give one-third of his income to the support of her and the child. But there is no such thing as an illegitimate child in Russia.

"At first, like every other radically new idea, the system was abused. Girls and boys would live together for a few days, a few weeks, as man and wife, possibly not bothering to register the marriage. For under the law, living together is just as much a legal proof of marriage as a certificate from the registrar. Then they would 'divorce' and try it again with another partner. Now they must wait six months, at least, before registering another marriage, or enjoying what legal privileges belong to their new status. The result is that with easy divorce the two mates are always 'on their toes' to be at their best, in appearance and in disposition. For when mutual attraction flies out the window, they are each free to leave. There is only love and companionship to hold them—no economic consideration. But I must be boring you with my monologue!"

I begged him to go on. He sipped his cognac and accepted one of the then procurable *paperosi*, the paper-mouthpieced cigarettes for which Russia is justly famous, and continued. "Consider the legalized abortion clinics. Again no more hypocrisy. A woman does not wish to have the child. She has a passable reason, or perhaps she has no other reason than that she simply

does not wish to become a mother. The operation is done scientifically, cleanly, and by the best of surgeons. If she does choose to have the baby, she ceases work for six weeks before and after confinement on full pay, always under the care of the clinic. Later, when she returns to work, the baby is taken care of during her working hours by the factory's or community's kindergarten, attended again by scientifically trained nurses. With abortion legalized, our increase of population is nevertheless higher than that of most other civilized countries and our infant mortality rate is down to 15 per 1,000, a fifth of what it was in the Czar's time. After all, human nature does not change much wherever you go. Women still want to be mothers. That instinct can be neither killed nor kindled by laws. And men want the immortality which comes with being a father. If they love a woman, they want to reproduce in her likeness.

"The Russian home-life of today is pretty nearly as solid as it always has been. I don't refer now to our younger intelligentsia—they are also much the same the world over—but to the rank and file, the backbone of our country, which, as in yours, is the farmer, the peasant, as you refer to him over here. All he wants is a wife and children, to grow enough to feed his family, to have a surplus to give to the government to assure his keeping his land and in return for which he will get his seed, his fertilizers, and the use of agricultural implements. He neither knows nor cares whether you'd call it a 'tax' or a 'collectable surplus,' or what the terminology may be. All that interests him is the amount of the tithe that must go to the government. Whether he gets rubles, or whether he barters, he cares not, so long as he procures

those necessary commodities which he himself cannot produce. Incidentally, there are sections in the Soviet Union where the peasants don't even know of the death of the Czar, nor do they give a damn who's in the Kremlin, as long as their daily life is seemingly improved.

"Then take the cultural program—teaching the masses to enjoy books and music—classical, not jazz, of course. Hygiene, the rooting-out of social diseases, the continual hammering-away at the evils of drink, and so on—consider all these. In the few days you've been in Russia, you must have been impressed with the efforts in those directions."

I admitted I was, and had been.

"Before I stop," he continued, "take the dictatorship. It is what Russia has always had, always will have. We are temperamentally and psychologically suited only for that type of government. It is what we fundamentally need and subconsciously want. It is the only form which we truly understand. Give us your democratic forms and we talk our heads off, bicker, and do nothing. Stalin is a great man, a great dictator. He is sincere, at least that, and the peasants and workers sense that tireless sincerity. Everyone makes mistakes, but when the Kremlin makes them, they are the first to criticise and condemn. Then, without lost motion, without endless argument, with but a stroke of the pen, out goes the mistake into oblivion. So it was with our attempt at prohibition. It didn't work. It created hypocrisy; bad liquor poisoned the people. A commission of experts was appointed—doctors, economists, sociologists—and with a stroke of the pen, prohibition was no more. In its place came government production and distribution, absolute

control, a revenue-producing business, and, finally, a really scientific campaign of instruction against the drink evil, which is having untold, lasting effect."

I thought of the striking posters I had seen in the stations, theaters, public squares and stores—pictures, modernistic art-sensations, which once seen are never forgotten—a really effective campaign of intelligent propaganda which in ten years will do more to stamp out drinking among the Russian masses than all the laws ever written. I felt that what we need in America was some sort of "dictator."

The dining car conductor had finished eating. Wiping his mouth, still stuffed with food, upon his sleeve, he arose and approached us with our check. Our party was alone in the car. The waiters were gathering up the debris, taking exquisite care not to disturb the cloths which must be left in place for the morrow. Our conversation had suddenly ceased with the approach of this probable agent of the omnipresent GPU, who, even now, was eyeing Blankov with obvious suspicion. The latter took the check from my hands. He insisted upon paying his share of the wine and liquor. We arose.

"And tomorrow morning, bright and early, if we are still on time," he said, "you must get off at Viatka. The station is filled with little booths where private traders, nepmen, still sell their wares. Viatka, you know, is the home of Russian wood carving. You can get wonderfully well-made cigarette boxes of that beautiful wood coming only from the burls of the Karelian birch, and balalaikas, and toys, ingenious little toys, for the children—all for a ruble or so. You mustn't miss it." With

a click of the heels, a true bow of the courtier, a kiss of my wife's hand, and a polite "sleep well," he was gone. Gone into the "Russian" sleeper. No Internationale car for him—an economist of the Railway Commissariat.

CHAPTER NINE

THE URALS

THERE IS one outstanding peculiarity which the traveler in Russia immediately discerns. The railway stations are practically always located on the outskirts of towns. As a result, the detraining passenger finds himself possibly a couple of miles from the town proper, and is therefore dependent upon some sort of a conveyance—in summer of a droshky, in winter of a sleigh. Furthermore, due to this peculiarity, he seldom sees anything of the cities and towns en route. He gets little more than a distant glimpse of a compact mass of low-lying buildings, provincial towns nearly always either of logs or stucco, punctuated here and there by picturesque, mosque-like church spires.

Until one reaches the Urals, the trip eastward from Moscow is rather drearily monotonous. One traverses nearly a thousand miles of flat plains, an agricultural country of scattered wheat fields and patches of woods, with here and there a wide, lazy river flowing southward into the Don or the Volga. The villages are

nearly all identically alike. There is the same log station, the same group of huts bisected by a "Main Street," which is nothing more than a wide, muddy, rutted road, whose ruts, winding from one side to the other, serve to render it moderately passable. The farms radiate from the village for a distance of several versts, the peasant "commuting" between his work and his home.

But during our first trip, the stations always were, to us, an interesting experience. Here one sees, possibly, the Russia least affected by the change in régime. No noise and confusion of rising industries here. No workers' quarters fast nearing completion, no clinics, no new schools, museums, and so on. The one great recognizable difference since the dissolution of the monarchy is the maze of radio aerials rising from nearly every roof. Merely a pole with wires leading from it, bearing testimony to how well the little crystal receiving sets have been distributed throughout the Soviet Union to "culturize" the peasant with music, lectures and, above all, propaganda. Then, too, the co-operative store and the headquarters of the local soviet with their identifying crossed hammer and sickle may change the outward appearance slightly. Otherwise, things must be pretty much the same as before. Here, too, the church may still be used as such, though possibly, the people willing, it has been converted into a school, a kino, a clinic, or a granary. But every time the Express stops, it is fairly certain that most of the village will be down to see it and its cargo of strange beings, the *Inostranetzi* from the outside world.

Here the people sell their wares, such as they may be. Stunted apples, possibly four or five for a ruble;

eggs, usually cooked and held in stock until sold, no matter how long the process; dirty, greasy foodstuffs, varying with the season, and so on.

Shortly after Viatka the Express begins to ascend the western slope of the Urals. That night one reaches Perm, again discernible from a distance, where one crosses the extremely long bridge over the Kama River, the largest tributary of the great Volga. It is at this point that the Trans-Siberian road, as such, actually begins.

Between Perm and Sverdlovsk, which one reaches the following morning, is the signpost bearing the word, EUROPE-ASIA. Geographically, the height of land comprising the crest of the Urals and dividing the Volga watershed from that of the Ob is the boundary between the two continents. But due to the creation of the separate politically-administered territory of the Ural District, many maps show the Europe-Asia line making a wide swing to the East at this point. Some maps still assign this section to Siberia. It is all rather confusing when one wants to be accurate. And the Ural Mountains were equally confusing to us. We simply could not find them! We merely traversed a long ascending grade, then started down the other side. The landscape had become more densely forested, the terrain more rugged—but it was hilly rather than mountainous. The real mountains, rising to heights of six or seven thousand feet, are located to the north and south of the railway, which follows a wide pass between them. It is interesting to remember that the youngest geological formation of the great Paleozoic system, the Permian, is named after the western terminus of the actual Trans-Siberian road.

At Sverdlovsk one has already dropped down the

Asiatic slope of the Urals. Here and beyond there are the same monotonous plains and forests. But the city itself, being the capital of a huge industrial district, is not uninteresting. The interest lies not in the town itself, even with its 140,000 inhabitants, but rather in its history and in the quick tempo of its expansion program.

The city was founded by Peter I in 1723 and derived its former name of Ekaterinburg from its first designation, Catherine-Burchom. Its present name honors the great Communist, Sverdlov. Its industries, old and new, are many—electro-mechanical works; steel cable mills; Uralmachinistroy, the great machine-building plants; Uraltextil, the cotton-spinning mills; plants for the curing of mahorka (the weed constituting the lowest grade of tobacco); breweries; flour mills; a distillery; brick-making and gem-cutting plants. From Sverdlovsk a network of railways radiating in every direction taps the huge natural resources of the district and joins the capital to the equally large industrial center of Chelyabinsk; to Samara and the Southern Urals; and to Magnetogorsk (Magnet Mountain), where the largest plant for the production of iron and steel in all Europe is now being built under supervision of American engineers.

Aside from its large agricultural and forest produce, the Urals boast what, to my mind, is one of the greatest potential stores of natural resources in the world. In the Permian are large deposits of sub-anthracite coal. Here also are important copper deposits, such as Kyshtim, where President Hoover was active at one time. Then there is gold, platinum, chromite, talc, mountains of iron ore, emeralds, amethysts (the finest in the world),

malachite, lapis lazuli, rhodenite, many beautiful varieties of marble, rose quartz, aquamarine, tourmeline, alexandrite—a rare semi-precious stone found only in this locality, which changes its color from green to purple according to the light, topaz, and other semi-precious gems too numerous to mention; zinc-lead deposits—and possibly the largest potential deposits of asbestos in any part of the world. It was to see these that we had come half-way round the world.

The city itself testified to the extreme tempo of industrial development under the Plan. A street-car line was in the course of construction (completed late in 1930). A new hotel had been built; entirely of concrete, it looked quite up-to-date from the outside, but the interior, as usual, was a disappointment. Block after block of workers' apartments were arising on all sides; central offices for the various trusts were being literally thrown up; a splendid building, equipped with high-powered radio receiving and sending apparatus, by far the most modern and impressive in appearance, had just been completed for the "workers" of the GPU; and so on. In nearly all cases brick was the favored material—badly made brick, irregular in color, size, and texture, of low compressional strength, with the ever-present stucco on top. Cement and structural steel were and still are "deficit materials," to be used only when strictly necessary and only for the most essential of plants.

But the opera house was a relic of the former régime—a truly beautiful building, even in disrepair; so also the Dielovoy Klub, completed just before the Revolution and, as its name, Commerce Club, implies, a truly aristocratic building. It is now used as a club for

the "white collar" class of Soviet workers; it has the best food in town; and its formerly magnificent ballroom is now used for lectures, meetings, and concerts. Only one of the city's many churches could be considered distinctly picturesque in the Russian sense. This has a tall, slender minaret and is not being demolished. Most of the other less characteristic churches were dynamited while we were in the district, to provide salvage bricks for, to the Soviets, more important uses. These bombardments were always accompanied by the usual fanfare—parades, blaring of bands, excited cheers from the Young Pioneer boys and the Komsomol girls. People of all classes, Orthodox and Protestant alike, seem to regret the loss of their public places of worship very little.

The old cadets' school is now used, I believe, as a technical school. The university, with some departments of which I later became familiar, impressed me as being extremely well staffed, with excellent equipment for instruction, and above all, research. Some notable scientific achievements are traceable to its laboratories, which are scattered throughout the town and frequently located in buildings formerly used for entirely different purposes. It was heartening, especially in the electrochemical and applied mineralogical laboratories, to see the almost equal percentage of young men and women students and to see them referring, not only to their excellent Russian texts, but also to the best authorities in English, German, and French. Yet it appeared to me that they were trying to turn out technicians of both sexes in their ordinary curriculum with too little grounding in the fundamentals—trying to evolve a skilled technical personnel in far too short a time. Just as the pro-

duction of cement, alloys, and bricks was irregular, so, too, the "production" of engineers was carried on in a tempo far too fast.

In Sverdlovsk the Czar and his family were destroyed—to use the word advisedly. The not unpretty, rather comfortable house in which the imperial family spent their last days has been made into a museum. Here, for an admission price of ten, or was it twenty kopeks? one can see the quarters where Nicholas II lived during the hectic days when Kolchak and his Whites were besieging the Reds. One is taken below to the basement, to the very room, the windows of which look out onto the walled-in garden surrounding the house where, under pretext of danger from machine-gun fire, the unfortunate family was led to execution. To see this room only once is never to forget it. A large wooden sign on one of the walls explains in Russian, French, German, and extremely quaint (to say the least) English how the last of the Romanovs died. Evidently few English or Americans have seen the room, for when I smiled at the naïve wording, I was asked to put the text into colloquial English. I was indeed working for the Soviets!

But the atmosphere of that room was simply overwhelming. Even the Communist guide seemed overawed, quieted, lost in thought. Only one or two of the bullet holes were on the level of one's head or torso. All the rest—there must have been eight or nine groups of them —were two or three feet from the floor or in the floor itself. Mute testimony that the Czar of all the Russias alone (or was it the Czarina?) took it standing up, probably wheeled around at the fusilade, and was then finished off, slumped against the wall. The Czarevich and

the womenfolk had probably mercifully swooned to the ground before their turn had come. The bullet holes have been cut out of the massive timber walls and floor in blocks. I was told that Kolchak did that when he finally entered the city, but I cannot refrain from wondering whether it was not the Bolsheviks themselves who removed those telltale bullets, sacred relics to be venerated and sanctified by those yet unsovietized masses who looked on poor, weak "Nicky" as the Little Father.

The rest of the story I heard in Moscow from one who should have been in the know, for he was with the Tcheka in Sverdlovsk at the time of the civil wars. Immediately after the execution, the bodies were carried several versts from the city and dropped down an abandoned mine shift. Later, when the Reds recaptured the district, they were recovered and secretly burned, the bones consumed by chemicals, the ashes scattered to the winds, and the ground resodded. It was the great fear of the Soviet Commissars who had this piece of work in hand that if any authentic physical vestige of the ruling family remained—a bit of hair, a tooth, a remnant of bone—it might keep aflame the traditional mysticism with which the Romanovs always had surrounded themselves.

We arrived in Sverdlovsk in the morning and on time (that was 1929; one is not likely to be as fortunate nowadays). Again we were met by a young lad from the Trust who knew only German. It seemed that in the Urals it was even more difficult than in Moscow to find anyone who could speak English. (And my contract had called for practically constant attendance by an English-speaking guide!) I really felt that we had gotten along

thus far, but knew that on the job an English interpreter, and a mighty good one, would be absolutely essential to me. Practically the entire success of a foreigner's work in the Soviet Union depends upon the ability of his interpreter. Later, at the mines, we were to be extremely fortunate in this respect.

We walked along the platform and through the large station which at one time must have been quite an impressive building. Since under the Soviet régime the classes of waiting rooms had been abandoned—even though the classes of travel had not, we again had to fight our way through masses of erect and recumbent humanity. Since Sverdlovsk was not only a terminus but also an important way-station where through trains might be anywhere from two hours to two days late, and since there is really no way to ascertain with any degree of accuracy just how late a train will be, there is nothing else to do but camp in the station until the train arrives. If it ever does. Sometimes, the train will pull in, and out again, and no one will know of it!

The station at Sverdlovsk presented an even more indescribable picture than the ones at Moscow, for here were the true provincial types. Wretches so poorly clad as to beggar all belief; babies—and I saw this in the dead of a Siberian winter—with nothing covering their nakedness but a single cotton shirtie. Every inch of floor was covered either with human bodies or with sacks, packs, and litter of one kind or another. Mongols, Tartars, Bashkirs, here and there a Chinese selling little do-jiggers made of colored papers, Kazaks—it seemed as if all the hundred and more races of the Soviet Union were represented in that station.

The fact that we were foreigners gained us neither respect nor right of way. The Russian peasant as an individual is usually courteous, diffident, respectful. *En masse* he is a boor. We were knocked hither and thither in our slow progress out onto the square. In Russia railway stations are practically always located on squares, if they are actually in the city.

In a fleet of droshkies we proceeded to the offices of the Uralrezinatrest (*rezina* means rubber), where our own Trust had desk-space. I was to learn that the agent of Uralasbest had a man's-sized job, even though he was located a hundred kilometers from the mines. This office handled shipments, in and out; procured the payrolls from the bank; located workers for the mines, and so forth. His was also the task of forwarding mail, telegrams, and packages. Probably the most arduous of his duties was fighting for a telephone connection to Asbest.

We found the agent to be one of the "peppiest" and most agile men in Russia, and one of the most accommodating. He accompanied us to the hotel where, at that time, the Trust maintained a permanent suite of rooms. We were loud in our praises as our carriage neared the outwardly impressive building. But I shall never forget the amazement of my wife and myself when we saw the interior. A bare, calcimined, rather unclean, odoriferous barracks. And six, lofty-ceilinged floors high—with no elevator. The one porter, showing neither emotion nor dismay, started hauling the baggage. Each of us took a hand. We were on the top floor, as the best rooms are always there. The small sitting room had too much furniture in it, while the tiny bedroom adjacent had simply two tumbled-down cots, covered with none-too-

clean linens, and one of those justly infamous Russian lavatories. My wife and I exchanged one meaningful look. We had but a single thought—to get out of there as quickly as possible at any price.

Lunch had been ordered for us. I was to learn that special food is served to foreigners, which, unlike in Moscow or Leningrad, is never available to the Russian in the dining room. He must perforce partake of the *table d'hôte* with possibly a choice or two. So, both to keep us from knowing what the Russian was served and to prevent him from knowing of the "luxuries" we foreigners received, such meals are, in Sverdlovsk at least, always served in the rooms. On our second trip, when the Trust had built its own log "hotel" and no longer maintained a suite at the Central, I was to experience eating in the dining room as one of the white-collared proletariat. For—and this is most significant—only office workers, technicians, and executives of trusts, transient or permanent, were permitted to live or eat there!

We put away a plate of typical Russian soup—a hunk of meat or a piece of fish swimming in a fatty liquid; the grease is never skimmed off. Cabbage is nearly always one of the ingredients. Then there was lamb, very good lamb, too; potatoes; some soiled, wilted lettuce; a *sladkii* (sweet) of coal-tar-product-flavored gelatine; white bread and butter (only for the foreigner, and even for him not always procurable); tea, in glasses, typically Russian—weak and with sugar. In 1930 and early in this year, white bread, butter, even eggs, sugar, and, finally, tea were to disappear entirely. In the provinces,

at least, the commissariat abandoned trying to fool the foreigner. With the weakening of the export program due to reduced commodity prices on the world markets coupled with the serious breakdown system of distribution, the poor, overworked, ever-distressed management of the hotel was powerless.

We inquired about a train leaving for Bajenova, the station some 56 kilometers east of Sverdlovsk on the Trans-Siberian, which is the junction point for the mines. Important and busy though the station is, the Express does not stop there, probably to prevent peasants and workers from using a *de luxe* train, though why it could not be stopped on signal to discharge passengers from Moscow is beyond me. We learned that the daily local starting from Sverdlovsk left about five in the afternoon. We told the agent that since there was no business to detain us, we would leave that very afternoon.

Again, even though the train started from Sverdlovsk and thus would leave neither early nor particularly late, we had to depart for the station over an hour ahead of time. Again the inevitable mauling and inhalation of garlic odors at the station. The interpreter was to accompany us to Asbest. He procured porters and took entire charge of our luggage, the agent departing with a cordial *Glück Auf!* We finally were allowed onto the train.

And here was a really new experience, a never-to-be-forgotten experience. The cars were obviously of comparatively new construction—steel outside, and fitted with air brakes. Here the modernity ceased. Inside, with all the double windows hermetically sealed, with an oil

lamp burning feebly and flickeringly at each end of the car, were three tiers, one over the other, of peasants. The lower layer were either sitting or reclining on hard wooden benches. Above these was a deck lowered over the seats at just a height that one sitting on the benches could not remain upright. This deck formed an unbroken layer of "uppers" jammed with human beings. Some three feet above them a similar series of uncovered wooden bunks comprised the third tier. And all those peasants were reclining with their feet—mud-bespattered boots, sandals, ragged or bare—pointing to the aisle. Never, never as long as we live, shall my wife and I forget the nausea which all but overcame us as we staggered up the aisles looking for a place. And now we realized that the Russians went to the station early in order to get a seat or standing room, without which they would have to wait for the next day's train.

Though our guide had found, or rather had insisted on places for us, the omnipotent word, *Inostranitz* (foreigner), always producing miracles, we fled to the platform in panic. The early September evening was cold and this type of third-class car was with open, practically unguarded platforms, but there we clung, holding on for dear life throughout that dusty, rocking two hours. What a roadbed! Nor did the passengers having to use the facilities entered from the tiny platform, which our forms were consistently blocking, help our situation. Despite the protests of the trainmen, which we understood despite our shrugs to the contrary, we held our position in that heaven-sent fresh air. It was only—and I have already warned the reader that this is being writ-

ten by a realist—when a queue had formed before the door and one poor unfortunate, with utmost unconcern and a certain degree of inaccuracy, had utilized the steps, that we fled precipitately back into the car.

CHAPTER TEN

I COMMENCE WORK

IT WAS already dark when we alighted from the local at the small but important station of Bajenova, the gateway to the abestos deposits some 33 kilometers to the north. Feeble electric lights helped us very little in distinguishing our surroundings. Across from the main line of the Trans-Siberian were sidings and store-sheds devoted to the Trust's business. Beyond, the tiny house serving as a station for the narrow gauge to the mines was barely visible. Dragging their belongings behind them helter-skelter, people were scurrying to gain a front place in the line for tickets which was already forming.

We were assured that the narrow gauge would not depart for a considerable time and that our tickets, as is usual with all privileged executives of the Trust, had been procured for us by the agent at Bajenova. Here was another phase of Communism which was not communistic. A couple of hundred yards or so away was the hotel, which only executives of the trust were entitled to use. We followed the agent and our interpreter through

a sea of mud to a little board walk so slick with ooze that the surface was barely negotiable.

The hotel included the Trust's local office; this was to the left as one entered the small, dingy building. Immediately to the right of the outer door was what should have been an outhouse. In the foyer was a large samovar, attended by a typical peasant woman. On the right was a suite of three or four rooms, the innermost of which was reserved for the *crême de la crême* of the staff—a sort of "inner sanctum," as it were. Each room had a number of cots; the *sanctum sanctorum* contained only four. A table and a couple of chairs completed the furnishings. The window was double-paned and puttied. Here we had our glasses of tea and awaited the departure of the train to Asbest.

More than an hour and a half elapsed before we were summoned to make the last lap of our more than seven-thousand-mile trip from New York. Counting the delays in Berlin and Moscow, we had been over two weeks en route. When I enquired why the little narrow gauge did not depart immediately after the arrival of the main-line train, I learned that it had taken all that time to sell the tickets for the journey to the mines. Although the distance was only twenty-five miles or so, the price was a ruble and twenty-five kopeks. (No matter what the project in Russia, it must be self-sustaining.) No one was allowed to board the little train unless he had been able to acquire a reservation. The tiny fifteen-ton industrial locomotive—incidentally, one of the regular mine locomotives—could haul just so many persons, no more. Those too far back in line must wait until the next day. Some had already waited two or three days, and since

the only shelter afforded to the masses at Bajenova was the station, the reader can readily imagine the sights and smells it afforded. But on our first trip, especially as I was a foreign consultant, we were not encouraged to see the station.

The train consisted of the tiny, wood-burning locomotive, German-made, and three wooden box cars, each with two windows cut in on a side. Hard wooden benches along the length of the walls comprised the seats. Due to the narrowness of the gauge (600 m.m. or 24 inches, totally inadequate to the size of the operations and to the weight and power of the rolling stock demanded, necessitating specially built equipment at additional cost), they were so narrow as to hardly accommodate one. The cars were so narrow that one had to sit up absolutely erect for the two (I lived through one excursion which took four) hours required to traverse the twenty miles. In winter, when the roads were slick with frozen snow, a *troika*, or even one horse, could make the distance in faster time than the train. Even sitting erect, one had to sandwich his limbs with those of the person opposite, and once the position was assumed, there was no changing it. The last car was reserved for the staff.

The whistle shrieked a silly shrill pipe, and we were off. A couple of hours more and our journey would be ended. Off through the fields skirting Bajenova, down a steep grade, the brakeman on each car tugging furiously to prevent the train from running away with us; across a sluggish stream, flowing northward into the Ob, finally to end in the Arctic Ocean. Then we stopped a half-hour to take on water. I wondered why it had not been done at Bajenova, and learned later, when I tackled the trans-

portation problem, that there was no water supply yet at Bajenova, although it was available for the Trans-Siberian. It seems that the added weight and steepness of grade combine to make a tender of some sort impracticable. When I read of Colonel Lindbergh, in anticipation of a flight, lightening his baggage from nine pounds to seven, I think of that train. I always felt a tinge of conscience if I had one unnecessary ounce in my pockets.

At the river stop, about five kilometers from Bajenova, I was told that the Trust had an asbestos fabricating plant here where asbestos paper was made, a process requiring considerable water. I saw the plant at a later date—not very prepossessing, more or less of an experimental forerunner of the modern one to be located directly at the mines. It produced a fairly uniform product suitable for internal consumption.

Then we started the steep upgrade over another undulating ridge, several of which, running east and west, divide Bajenova from Asbest. The tracks stuck to a tangent, as though avoiding curves, resulting grades notwithstanding. It was a rather poor piece of economy in railroad location. But *nichevo*—the Plan calls for the standard Russian gauge to be built by the State Railways direct to Sverdlovsk, eliminating Bajenova. If the trip is hard, if it is wasteful and inefficient to tranship all the huge amount of machinery and supplies necessitated by the intensive development of the mines (import material had first to be transhipped at the border), *nichevo!* It is the Trust's railway, and Moscow knows nothing of it.

We clattered and rocked through the refreshing ever-

green forests and across the tundra. We were north of the Trans-Siberian. Northward stretched only primordial forests and arctic wastes. We were in the Siberian-Ural wilderness.

As our eyes became more accustomed to the flickering candle which alone lighted the car, conversation was again resumed. Rubbing knees with me was a tall, rather distinguished man, whose attire was obviously superior to anything we had seen in Russia. He kept stroking his Leninesque imperial constantly, and finally engaged our interpreter in conversation. The latter said, "This is Mr. P——, president of the Uralasbest Trust. He speaks neither English nor German." We exchanged greetings, each speaking his native tongue. Here, then, was another instance of Russian psychology. Before me was the chief executive of the Trust on whose business we had come to Russia. He had been in Sverdlovsk the same day as we had; he had taken the same train to Bajenova; he had traversed nearly half the remaining distance to the mines before introducing himself to us! But we were to learn a great deal more concerning this man's peculiarities and methods of treating not only his Russian subordinates, but also the foreign expert.

With no further formality he launched immediately upon a series of questions concerning the production of asbestos in other parts of the world, particularly in Canada. This last is the largest producer of the commodity in the world. It is Canada (the Thetford district in the province of Quebec) that the Soviet Union must outstrip and outproduce. It is Canada which offers the chief *Konkurentzia* (competition).

"How many men are employed in the Quebec field, Mr. Rukeyser," was his opening question.

"The last calendar year," I answered through the interpreter, "all the producing companies in Quebec together employed a daily average of slightly over 3,100 hands. This includes all employees—mines, mills, outside labor, and office staffs."

"But we here at Asbest averaged nearly 12,000!" He said this in a tone of great pride, as though the magnitude and success of the operations depended merely upon the number of hands employed. "So you can see the size of our operations." The remark was typical of the Russian's love of the grandiose. Everything must be the biggest in the world.

I then inquired into the number of tons of asbestos fibre produced. The Russian deposits had turned out for the previous fiscal year approximately 30,000 metric tons of all grades, while the Canadian field had turned out over 275,000. With one quarter or less in men, the highly mechanized Quebec mines had produced nearly nine times as much fibre! The reader can readily understand how little mechanization had as yet taken place at this, practically the beginning of the Five-Year Plan.

He went on to explain that possibly two to three thousand of the nearly twelve were engaged in capital construction; over five hundred were on the transport system alone; nearly another thousand were the "mops," as they call them in Russian, i.e., the roustabouts, who haul water and wood to the houses, cleaners, droshky drivers, stablemen, and the like. Then there were the several hundred on the power system. The Trust has its own electric energy generating plant located at Egorzhino, some 65

kilometers to the northeast. He went on to explain that this steam-turbine plant was located directly at the pithead of some coal deposits—a sub-anthracite of fair quality. The Plan called for increasing the capacity of this plant to 36,000 K.W., a truly sizable undertaking in itself. It was equipped with Swedish turbines. Also, nearly every day almost a thousand did not report for work! So actually, on production, in mines, mills, and office staff, he figured that there were, let us say, 6,000 hands employed. Approximately 1,100,000 tons had been mined that year to produce the 30,000 tons of asbestos. 1,130,000 men-days had been required. Therefore, it became evident it was taking just about a man-day to mine and mill a ton of rock, whereas in Canada better than six tons of rock were handled for each man-day. It was easy to calculate mentally, as we conversed, that if about 6,000 were employed in mines and mills to toil over 1,000,000 men-days, the working year was not quite 200 days!

The rest of the trip to Asbest I was kept busy answering question after question about Canadian mines and mills, all sorts of strictly technical matters pertaining to asbestos production—uses, marketing methods, costs, world market prices, and so on. The Trust's president kept reverting always to Canadian mill technique, seemed mentally comparing these apparently new ideas with those incorporated in the *Gigant* mill which, as I said before, had burned before completion and was now being rebuilt along the general lines of its ill-fated predecessor. He would sink in thought; then, with that obsessed, almost hysterical manner for which he had been dubbed *Isteritcheskia Dama* (The Hysterical



FREE-TRADER SELLING BREAD IN OPEN BAZAAR



IMPROMPTU MUSIC AT THE BAZAAR, ASBEST



THE CENTRAL WORKERS' CO-OPERATIVE STORE NO. 1, ASBEST



THE NEW HOTEL AT ASBEST

Woman) by the workers, he would pull frantically at his short, well-kept beard and pound his knees with his fists as though his thoughts were fast and furiously ahead of his potentiality for immediate action. He would tell me about a certain mining system which had just been installed at a tremendous cost and ask me how a similar method was working in Canada. I tried to explain briefly that this system had special transitional use which conditions at Asbest did not appear to demand.

I could see a cold, white fury burning under that determined countenance. Here was a strong character, afraid of nothing and no one. Here was a man capable of fast action—too fast, even hasty and unreasoning. A man of moods, changeable as a chameleon; a man who would insist upon being surrounded by "yes-men." But forceful, impressive, and undoubtedly intelligent he was. I was told later that before the Revolution he had sold shoes in a retail store. Later, as a Communist, so the story continued, he was allegedly a school teacher, then an executive in the coal-mining Trust; somewhat more than a year previous to my first meeting with him, he had been made president of Uralasbest. Without an engineer's training and without higher education, I marveled at the amount of information that he had absorbed. He had a positively photostatic mind, but his ability to interpret the photostats was questionable.

Then and there I realized that something radical was amiss. I thought of my strange conversation with the technical director—that excellently trained non-communistic engineer who had come to our rooms at the Savoy in Moscow. I began to realize just what rôle I was expected to play in the drama, the protagonists of which

I was meeting under such strange circumstances. At that moment I sensed that a real tragedy lay ahead and that it was too late for me to avoid my part in it. In that half-light of a flickering candle I saw before me a man of large stature, massive head—a man who liked to be told that he resembled Lenin, a man who would be ruthless toward any one even suspected of sabotaging the Great Work which even a novice in reading human nature could discern was this man's all-consuming passion. Here was a keen native intelligence, with just enough knowledge to make it dangerous, getting its experience by the method of "cut and try." A most costly school of instruction! I felt quite certain that no matter what this man had recommended or approved, if anything went wrong—it would be the other fellow's fault. Subsequent events were to bear me out.

Suddenly the train emerged from the darkness of the forest. On all sides electric lights twinkled in small clusters. Here and there those demarking a street could be seen. We jerked to a halt at Illiyinsky, the first of the two stops at Asbest. We could already hear the hum of the plants and could see the floodlighting of the southernmost pits. The train nearly emptied. Here were most of the workers' quarters. A few minutes more and we were at the end of our long journey—the Oktiabr' station at Asbest. With a polite "*Dosvidanyia,*" nothing more, merely the polite bow, the president of the Trust was gone.

Our interpreter led us to a waiting droshky which had obviously been sent to meet us. I could by now understand that the "*Pravilna, Amerikanitzi*" with which the guide answered the driver meant "Right you

are, the Americans." Another wagon took our luggage. We bundled into the droshky and were whirled away from the little shed which at that time served as a station along a foully rutted road marked at long intervals by street lamps. Every second of the ten-minute drive threatened to see us bodily thrown out of the nerve- and bone-wracking vehicle. The droshkies at Asbest were not the Victoria type with high backs that we had known in Moscow and Sverdlovsk. They were made of woven reeds into a sort of backless basket body—a Bashkir invention, I was told. The horse was a beauty, well-kept and full of mettle, as were all the many beasts maintained by the Trust. A large wooden yoke over the horse's neck joined the two shafts, as is general throughout Russia. We never saw an equipage of any sort without such a rig. At first we thought that yoke was intended to prevent the carriage from turning over, though the real reason was quite different. The horse's collar is suspended from the yoke, and thus the shafts are made to take its weight off the animal's neck.

We pulled up at a delightful old house set in a sort of private garden off the street, and were met by the people who were to act as our hosts during our stay at the mines. The Svedbergs were a charming couple. We were to find them ever thoughtful of our comfort—courteous and friendly indeed. We grew to be genuinely fond of them, not in any passing sense, but deeply, feelingly. Mr. Svedberg was a short, plump, fatherly-looking man in his late sixties, with a face that simply radiated good-humor, a truly cosmopolitan experience in life, a genuine sweetness of character, culture and intelligence. One instinctively felt that he could neither

harbor a mean thought nor commit a petty act. We soon learned that he lived only for two things—his family and his profession. He was a Finn and still retained his Finnish citizenship and passport. He had been the manager of the mines for the private owners before the Revolution and had lived at Asbest for nearly thirty years. He knew asbestos inside and out and was by far the best-posted man on that subject in the camp, if not in all Russia. He had made many trips abroad, even to America and the Canadian field. He had been educated in Helsingfors and taken his technical degree in Germany. After holding executive positions throughout the south Russian coal and iron mines, he had finally been engaged to inaugurate the early development of the asbestos mines from the grass-roots down. He had built the first workers' quarters in Asbest, the first rude milling plants, and the first offices and executives' houses. He spoke Russian easily, but, as his wife used jokingly to remark, ungrammatically, as a foreigner, and with a bad accent. His German was fluent.

Mrs. Svedberg was half his age, vivacious, prettily attractive, with an admirable devotion to her husband. She was from the Ukraine; spoke no word of any foreign tongue; knew how to dress herself neatly and not unmodishly with the poor facilities at her command; worked like a Trojan; and was ever cheerful. She anticipated our every wish; nothing was too much trouble where any possible increase in our comfort was concerned. Her mother, or *Babushka*, as we too learned to call her, could have been a character out of Tolstoi. Musa, the pretty fifteen-year-old daughter with a real "school girl complexion," had been taught German as

a small child, but could only be made to say a word bashfully under extreme provocation. An older daughter was studying art in Berlin. There was a jolly and extremely capable cook engaged for our coming, and a real peasant "biddy" who did the chores. My wife and I took a strong liking to them all and they for us.

Svedberg is now dead. His wife working to eke out an existence in Sverdlovsk now thinks only of keeping Musa at school. The other daughter, expatriated, never saw her father again. The comfortable, typical bourgeois furnishing of their "solid" home, the large technical library—mementoes of a bygone age—everything has been dispersed, sold for whatever they would bring, some taken over by the Trust and left in place, and some, first confiscated by the GPU, then returned, to go the way of the rest. But that first night, when our hosts graciously led us to our rooms, provided us with the luxury of a hot bath, sat us down to table set with sizzling hot eggs, cold cuts, caviar, jellies, homemade white bread, rich, unsalted butter, cocoa, and a *Za vatsche zdorovie* (to your health) in vodka and wine, none of us there babbling gayly in three languages could foresee the difference a few weeks were to make.

Two rooms had been assigned to us on the ground floor. The one in which we really lived was a combined bedroom and study, most comfortably and cleanly furnished. The beds were good and the linens of fine texture, soft and clean. I had been supplied with a massive practical desk, bookshelves, and reading lamp. Our two windows looked out onto the garden over the lake beyond and caught the southern sunlight which later, in the winter months, was to swing in a low-lying arc

in the horizon. For in summer in that latitude there is practically no darkness—merely a twilight after the sun sets at ten-thirty or eleven at night to rise at one-thirty or two in the morning. In winter, however, it is pitch dark at four in the afternoon and only really light at ten in the morning.

Our first day was a strenuous one indeed. Off the Express in the morning, on the local in the afternoon —nearly six hours on those two "hard" trains to cover a mere 90 kilometers (less than 60 miles). Now it was midnight. We fairly fell drunk with exhaustion into the inviting beds, to commence work on the morrow.

Before continuing with my personal narrative, I believe it necessary to describe just how a Soviet trust functions and to sketch in the background of the workers with whom we must perforce come in contact.

CHAPTER ELEVEN

THE SOVIET STATE TRUST

I BELIEVE that it is not generally appreciated how closely the organization of a Soviet state trust follows, externally at least, that of a large corporation under the capitalist system. The larger industries approximate in structure and function what is known in the United States as the European cartel. In the first place, many if not most of the Soviet trusts have a share structure. The shares, however, unlike those of corporations under capitalism, are not owned by private individuals or distributed into the hands of the public; they are deposited *in toto* with the State Bank. Any earnings on these shares accrue to the national treasury and are socialized for use in the theoretical ultimate betterment of all the people. An American corporation may have two or three hundred thousand stockholders owning, on the average, only twenty to thirty shares each (is this a form of socialism?). Each stockholder has the right and is able to dispose of or increase his holdings as his wish or his pocket-book dictates. In the Soviet trust each

and every enfranchised member of the entire population is a theoretical shareholder in each and every undertaking and industry comprising the entire national economy under the present régime. There are, in effect, roughly 160,000,000 shareholders in every Soviet state trust.

The State Bank may be likened to a trustee with whom the capital stock is deposited. As trustee, the bank votes the stock and collects and dispenses income accruing thereon; likewise, in its capacity of trustee, it is responsible, through the Supreme Council of National Economy, for the satisfactory and profitable conduct of operations. So, although in what follows there will be evident a close resemblance *in form* between the state trust in Russia and the corporation of our experience, it is obvious that such similarities are merely those of form and external functioning—the objectives are diametrically opposed. Whereas, in the capitalistic organization the aim is the enrichment either of a private closed ownership or of a relatively greater number of people who intrust their smaller capital to the management of this or that corporation, in the Soviet trust the one and only object, again theoretically, is to produce a commodity which by its production will benefit the entire mass of the Russian people either through supplying some human need and thus raising the standard of living or through making possible an exchange with some other country which can supply a needed product.

It is only in this respect that Soviet industry can be said to be socialized. In the detailed structure of the trust the usual corporate procedure and organiza-

tion are followed, from the duties of the officers down to the method of payment of workers. Now, having shown how the trust is socialized, it may be interesting to point out the other outstanding difference between the trust of Soviet Russia and the corporation as we know it. The Soviet trust is nationalized or, better, "rationalized." In other words, the development or operation of any industry in Russia is dictated in minutest detail by the demands of the Five-Year Plan. But contrary to common belief, the tremendous and varied *details* of the Plan, as applied to each industry, do not originate from Moscow. They are worked out at the point of production and upon completion are forwarded to Moscow for approval or change.

So much has been written concerning the larger phases of present-day Russian economy that I shall point out here only for the sake of emphasis that the Plan operates through the Central Planning Commission and the Supreme Council of National Economy (known in Russia by its initials B.C.H.X., pronounced Vay, Ess, En, Cha) to develop natural resources and industries according to a definite, scientific plan so as to yield, without waste, duplication, or lack of conservation, what has been established as requisite for the national economy.

When, for instance, it was decided to produce asbestos, the Bajenova deposits were chosen for intensive development and rationalization because of their immediate accessibility, the known extent of the deposits, the extent of former development, and the availability of labor, power, and transportation to markets and points of consumption. The mineral is to be found in

many districts—in the Caucasus, in Georgia, in Eastern Siberia—but these other deposits will be held in reserve until such time as consumption justifies their development and operation.

Highly centralized and large-scale operations, with attendant efficiency, minimized waste, and reduced overhead, may eventually characterize Soviet trust operations. The mistakes and ills arising from the magnitude of the undertaking and from the lack of experience and precedent have been emphasized, although not exaggerated, by most observers, who have not taken into consideration the fact that in such a stupendous undertaking as the present Russian experiment a certain inefficiency and accompanying lost motion are bound to be evidenced in the initial stages. Should the mistakes and blunders not be eliminated they will multiply and devour; but if, as I suspect, they are being recognized and will be overcome, the ultimate result—perhaps not in the short span of the remaining two years of the plan, but within the life of the present generation—may be a new standard of efficient, planned, and coordinated production.

Each trust may be said to have its head office in Moscow. There was until recently an increasing tendency to group smaller industries under a major division having a natural, common basis of administration. Uralasbest was until last year an independent trust completely administered from Asbest, the point of production. In 1930 this comparatively small industry was grouped with the production of other non-metallic minerals, such as magnesite, talc, and chromite, to form a division of the larger and important national trust

known as Mineralrud (Mineral Ores). Today decentralization has set in. Mineralrud has its executive offices in Moscow, administered by a president and three active vice presidents. The presidents of the trusts, in all cases that I have personally observed, are members of the Communist Party. So also are the two non-technical administrative vice presidents. The third vice president is usually an engineer, who may be a party or a non-party man. Usually he is not a member of the party.

It is the function of the head office to confer with the Supreme Council of National Economy and lay down the production norm for each operating unit under its jurisdiction. Likewise the permanent and operating capital required by each is predetermined and supplied through the head office, the V. S. N. K. and the State Bank. All production is routed and disposed of through this office. Credit from the proceeds received from sales is allocated by the accounting department to each unit. The amount of imports—material, equipment, and technical services—allocated annually to each operation is fixed by the Moscow office on the basis of the amount of exports either contracted for or estimated as probable. In these matters the final word, again, lies with the Supreme Council in conjunction with the State Bank and the Central Planning Bureau. All decisions with regard to major policy emanate from the head office in Moscow.

It can be seen, therefore, that the head office of a Soviet state trust, generally speaking, performs approximately the same functions as the head office of an American corporation—financing, sales, setting up of

production norms for individual units, control of major policies, determination of programs of development and capital expenditure, control over expenditures and receipts, criticism of operations, including production costs, and final word on all matters pertaining to technique.

I am attempting in this book to record only my personal observations and experiences together with information given to me by persons whose statements I have reason to feel are authoritative. It follows that everything I record here is specific in nature and I make no attempt to generalize. It is a truism that it is impossible to draw general conclusions regarding Soviet Russia from the study and observations of one person, even though that person may travel throughout the length and breadth of the Soviet Union. Russia occupies one-sixth of the land surface of the world. To traverse it would be in itself a tremendous task; and as soon as one had finished one's tour of observation, conclusions drawn at the beginning of the trip would no longer be valid.

Soviet Russia is a land of continual flux, of shift of commodities, resources, and man power from "front" to "front." Everywhere one hears war terminology; "shock-brigades" is an everyday expression in the mouths of man and babe alike. The psychology of 160,000,000 people, made up of more than a hundred races, speaking as many, if not more, different languages, is being deliberately influenced and controlled by a handful of men who stand at the helm of this gigantic experiment. It can easily be understood why generalizations are impossible—why a condition

which exists on this "front" today may be totally changed tomorrow, perhaps for something better, perhaps for something worse.

Let us now turn our attention to the organization of the operating units of the trust—the producing end. The unit, in this case Uralasbest, of the state trust Mineralrud, has its own president who under the new organization will probably be called director, and three vice presidents who, similarly, will be called vice directors. The director and two of the vice directors are party members. Incidentally, it must be remembered that there are only about 2,200,000 full-fledged adult members of the Communist Party; that to become a member of the party seems to be a very difficult undertaking. To those 2,200,000 men and women falls the gigantic task of administering politically and industrially the entire Soviet Union.

The director or president functions in practically every detail of his work, as does the president of an American corporation. Subject to Moscow's approval, his word is final in every phase of administrative activity that falls within the scope of production, development, and new construction. One vice president, a Communist, is administrative assistant to the president. The second, also in this instance a Communist, is director of building operations; in the case of Uralasbest he is director of a subsidiary known as "Stroiuralasbest" (Construction Department of Uralasbest). The third, not a party member, is an engineer who is called the technical director and would correspond to the works manager or perhaps the general manager in America.

Under the authority of the administrative vice

director is the commercial director. His duties correspond quite closely to those of the treasurer of an American corporation. He is responsible for inventories and for shipments of finished products. He also provides the financial liaison with the head office in Moscow—he must obtain the necessary money for the payroll every fortnight from the branch of the State Bank of Sverdlovsk. He is concerned, too, with the product after it reaches the market.

Also under the authority of the administrative vice president is the office manager, usually a party member. As his title implies, this official is responsible for the detailed conduct of the general offices. He directs the stenographic staff, all incoming and outgoing communications, the bookkeeping department, all cash expenditures. Under him are the chief secretary, the head bookkeeper, the clerk in charge of dispatch and receipt of communications, and the pay clerk.

The administrative vice president, who is, of course, primarily an assistant to the president but who takes full charge when the president is absent, has authority also over the department of the chief economist. To me this department was perhaps the most interesting of the trust. The chief economist is responsible for all the control figures of the Five- (now Four-) Year Plan as applied to his particular industry. I cannot overemphasize his importance or the magnitude of his responsibility. Assigned a norm or quota set by Moscow, it is his duty to work out all the day-by-day details of the Plan—the costs of production, capital required, and every other problem involved.

To most Americans the Five-Year Plan means

hardly more than those three words; it is a mysterious economic program stating what the production of each and every industry shall be for each year for five years; its consummation may or may not, depending upon the personal bias, destroy all the institutions with which we are conversant. Actually, as I saw it, the plan is best described as an intensively developed budget system. Budgets are drawn up for each industry and activity. But these budgets are constantly being revised to conform to the results of day-to-day experience, and it is indeed true that the revisions are usually designed to increase the tempo. For example, at the expiration of the last fiscal year—October 1, 1930—it was decided by Moscow that the fiscal year should be brought into conformity with the calendar year. This made necessary the creation of an extra quarter extending from October 1 to December 31. Coming as it did almost exactly in the middle of the five years covered by the Plan, the change in calendar meant a change in all detailed as well as general control figures for the remainder of the five years. I personally saw the Plan, as it related to our industry, changed at least five times in fewer than five months. But the net result was to increase by nearly 25 per cent the planned production for the coming year in total tons of output. Until late in 1931 it was a byword in Russia that when the control figures were changed it was always a revision upward in production and downward in costs.

To one inexperienced in the application of the Five-Year Plan it may appear that Moscow is concerned only with setting the figures for the production norm for each industry. Production, to be sure, is the *ratio*

existendi. But setting the control figure is only the beginning. Here, again, it is necessary to remember the extent of the Soviet experiment. The Plan concerns the lives and needs of almost one-tenth the entire human species, representing scores of races, nationalities, and languages, whose customs and demands vary as they inhabit arid desert, mountainous semi-tropics, frozen steppes, or the forest tundras of Siberia. The requirements of a wandering nomad tribe as well as those of a city of two million people were predetermined and planned for five years ahead. It is no wonder that mistakes occur in the accomplishment of the Plan, that revisions must be made, that in some cases, in some industries, blundering inefficiency creeps in. An attempt to transform, even partially, a backward and essentially agricultural country into a dominantly mechanized and industrialized nation within five years would seem to one who has not actually observed what is going on in Russia today nothing short of madness. Yet it is being done.

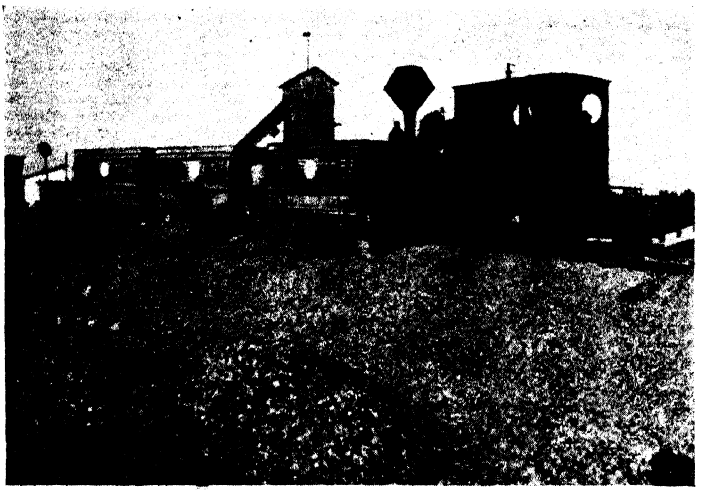
The Plan is being carried out for practical purposes. It has been speeded up. Let us take a case in point. The tempo of steel production is stepped up. Each ton of steel added means so much added mechanical equipment and plant capacity, which in turn requires so many more kilowatt hours of energy to make the wheels go round. Each furnace turning out steel must be supplied with the necessary pig iron, fluxes, and other necessary materials. Each ton of pig requires coke and limestone; these in turn mean a greater demand on quarries and mines. All the materials necessary to produce this extra ton of steel must



PRIMITIVE MINING METHODS STILL IN VOGUE AT ASBEST IN 1929



HAULING WATER FROM MINE SHAFTS



GRADING THE APPROACH TO THE NEW MILL AT ASBEST. The locomotive is a relic from the former régime



IN THE MINES AT ASBEST BEFORE MECHANIZATION, 1929

be *transported* to the plant and the finished product *removed.* This requires railway building, which in turn requires the manufacture of rails and rolling stock. Everything requires maintenance. Above all, everything requires man power. And man power must be housed, fed, clothed, schooled, supervised, and paid.

Trucks, tractors, and cars are built. The Plan is speeded up. More are required than was at first planned. These require brake-linings. Brake-linings mean asbestos. The production of asbestos must be speeded up. And always in the background lurks the bogy of counter-revolutionary activities, the "enemy from within," and the equal bogy of short-term credits and imports purchased with cash which must be paid for on time by the only device possible—the exporting of more, or at least of no less, than is imported.

What is expected of the chief economist can best be exemplified by studying his duties as I observed them at Uralasbest. He starts with the production norm sent him from the head office in Moscow. This has been arrived at after painstaking and infinite calculations by the Central Planning Commission which correlates the entire Plan. This production norm is predetermined for each year of the five. The production must then be allocated by months—and it must be borne in mind that in few if any industries can production be maintained at an even rate throughout the year. In asbestos production, where the greater proportion of the rock removed comes from opencut mines, winter conditions slow down operations. Then, too, the available labor varies, seasonally and otherwise. Finally, during this expansion program, just when and at what point newly

projected plants will come into production must be judged to a nicety, as well as when rationalization of old, existing ones will be effected, along with the accomplishment of mechanization of mining methods. So, in his monthly distribution of production, the chief economist must report in his plan the amount of imported and Soviet-made machinery, raw materials, and other supplies required, and the amount of money needed by the trust each month, first for capital expenditures, secondly for payrolls and other direct operating costs. Man power, also, must be predetermined for each month and this man power allocated to the various phases of the industry from the office force to the "mops"—a small army of roustabouts, cleaners, and others not involved actually in the production of the asbestos. Finally, he must calculate not only the requirements for the production of asbestos, but also for the maintenance of more than 13,000 employees and their families.

The chief economist, moreover, is responsible for the daily, monthly, quarterly, and annual statements showing the amount of production of each grade of finished asbestos and the itemized costs of producing the various grades. These reports are similar to those required in an American corporation, with this difference: the Soviet economist must report not only what *has* been done each day, week, and month of the year; he must show, in a second column, the predetermined control figures set up for each item by the Plan, and in a third column he must show realization of the Plan in plus or minus percentages, daily and cumulative.

CHAPTER TWELVE

THE WORKER

I NOW turn to the worker—how he works and lives. The misconceptions which apparently exist here in America concerning the everyday life of the Russian worker were nothing short of appalling to me upon my return to this country. Such misconceptions exist even among intelligent professional and business men who read intensively upon the subject. The reason lies perhaps in the fact that so much of what is written about Russia today attempts to generalize rather than to describe particular conditions, and that it is tinged with the personal bias of the writer or the policy bias of the publication, as the case may be.

Everything in life is comparative. To understand conditions among Russian workers today we really should have as a background for comparison a knowledge of the conditions existing under the old régime. I am frank to say that I have absolutely no first-hand knowledge or experience of Russia prior to the year 1929; but since my connection with the Soviets I have

made an earnest attempt to study, through carefully selected reading, the life of the worker in the last days of the Czars. Information obtained by reading has been supplemented by contacts with the people who really knew industrial conditions in the country prior to 1917. In setting down here what they have told me I make no pretense to be presenting anything general or typical or even accurate. I can, however, vouch for the accuracy of my own observations as to the condition of the workers at Asbest both before and after 1929.

I have seen the workers' former quarters in the large industrial centers in Moscow and Leningrad. These were characterized by the filth, squalor, and unsanitary conditions which we in this country always associate with the worst of our industrial centers as they existed toward the close of the last century. I have had pointed out to me in Leningrad, by an engineer who has been connected with Russian industry for over thirty years, houses in which more than twenty workers of both sexes and of all ages existed in a single room having less than 300 square feet of floor space. The windows were incapable of being opened. As fast as one bed (?) became free, as its occupant went on shift, the next occupant was waiting to use it. The shifts seldom consisted of less than ten hours' work—usually eleven, twelve, or fourteen. The ten-to-eleven-hour shift, I may say in passing, still exists in the asbestos mines in the Canadian province of Quebec, where I have had personal experience. The average wage of the Russian worker was pitiably low, as may be proved by reference to official reports of the period. One bourgeois engineer in Moscow, a non-party man, told me that in the factory

at which he was employed before the war the body of a living woman was hoisted up and down through a chimney flue for the purpose of cleaning it! This anecdote strains all credulity; I state it for whatever it is worth.

At Asbest, upon my first arrival there in 1929, I saw the workers living for the greater part under the conditions that existed when the mines were under private ownership. Most of them were quartered in large log houses consisting usually of one huge room, either unpartitioned or divided by flimsy curtains. An entire family—man, wife, and children—would have a space possibly six feet by twelve in which to live, sleep, and cook. The beds were composed of boards covered by a heap of rags. The workers seldom if ever undressed. There was no attempt at providing latrines or other like facilities. Some families which we observed were living in a sort of earth hovel; others in huts half of which were hardly more than excavations in the ground, rudely roofed over. Today these shelters, where they have not been entirely removed, are being used for cattle.

In 1929 the trust embarked upon an ambitious program to provide new housing in the form of communal apartments and individual houses to take care of between 13,000 and 15,000 workers and their families —probably some 40,000 persons in all. A new town site was planned and laid out at some distance from the mines and to the windward of any dust arising from the milling operations. This town site borders an almost circular lake approximately five-eighths of a mile in diameter, the town being laid out around three-quarters of this body of water in radiating streets lined by

blocks of one-, two-, four-, and eight-family houses.

Let us turn now to the work itself. The shifts have been shortened so that the worker in the opencut mines or on the surface puts in a seven-hour day, of which one hour is allowed him for dinner and rest. This makes six working hours net. The underground miner has a gross shift of six hours, as does also the mill worker. The working "week" consists of four days, the fifth day being free. This has recently (November, 1931) been changed to a six-day week with a universal rest-day for personnel and machines alike. The working day is shortened one-half hour.

The office and technical workers formerly worked from eight in the morning till three in the afternoon with a half-hour's recess at eleven o'clock. The hours were changed in the fall of 1930 to extend from nine till four. In Moscow the offices are usually open from nine or nine-thirty till five; but the executives work far into the night.

The average wage for a mine worker at Asbest closely approximates 100 rubles a month. For his quarters he is charged a very small rental, which is on a sliding scale depending upon his earnings. Thus a man earning 100 rubles a month may pay 5 for a certain apartment; whereas a man earning 200 rubles would pay possibly 10 or 12 for the same quarters. This is more commonly true in the cities than in the newly developed industrial centers, for in the latter the type of quarters furnished varies according to the class of work done (communism?). A mine worker, for example, will live in a multiple-family house, whereas an engineer, who may earn up to 800 rubles a month, will

have a single or two-family bungalow. The layout of the two-family houses resembles that of similar dwellings here in America. The houses are all lighted with electricity, for which a purely nominal charge is made; all have bathrooms and kitchens and outbuildings for live stock; all are surrounded by ample ground for gardens. Water and sewage systems are being installed as rapidly as possible. Pure drinking water is now furnished from the underground workings, and the purity of that supply is constantly tested and maintained.

The number of square meters of floor space per person (at Asbest) as well as a constantly rising wage scale is predetermined for each period of the Five-Year Plan; the percentage of accomplishment of the housing and wage program accompanies all figures on production and costs in the progress reports. In addition to his actual wages and his low-rent advantages, the worker receives other indirect benefits. These consist partly in insurance, pensions, vacations—a month each year on pay at some resort, with all expenses paid—and free medical and hospital services. Primary and secondary educational facilities are provided, and every incentive is offered to workers as a preferred class to attend institutions of higher learning. Women about to become mothers get full clinical attention and are granted six weeks' leave on pay before and after confinement. Workers' clubs offer inexpensive entertainment and cultural facilities. Lastly, commodities such as foodstuffs are provided, *as available,* at the state co-operative stores at prices in keeping with earning power, or gold-basis producing capacity.

The workers, in general, belong to their respective

trade unions, which make contracts with the trust setting forth the conditions of work. These contracts must be strictly adhered to by the trust. The unions also concern themselves with the safety of actual operations as well as with living and other social conditions. The safety of the men at work is guarded by inspectors, and no mining methods may be installed without their approval. This situation is completely analogous to conditions here in America.

Since our arrival at Asbest the mining and milling plants, old and new, have been equipped with safety devices and sanitary and hygienic facilities such as are found in this country. At the shaft heads are excellent "change-houses" following the best American design, wherein the men must shower, hanging their working clothes in specially provided drying-rooms. Cafeterias are rapidly being installed in all plants.

In designing new plants or layouts, the American consultant has impressed upon him at every turn that the safety and health of the worker are of primary importance. The plants must be so designed as to give a prescribed minimum of light and air. The machines must be so spaced in any layout that no crowding will result, a minimum of one meter being requisite between machines. All moving parts must be covered over, all dust creators must be equipped with aspirators, and so on. The reader can see that to accomplish all this takes time. It is not done in a day. But when I compare conditions as I found them in 1929 with those existing today, the improvement is impressive.

The workers are paid fortnightly, as is the usual practice in similar work in this country. They are paid

in cash. If the bank for any reason should not be able to supply the cash on time, as was sometimes the case during the money-hoarding period last year, the workers are supplied with company scrip and credit cards.

I mention such incidents to point out some of the enormous difficulties encountered by the men at the helm of the Plan. Yet it seems to me that as these unforeseen difficulties arise they are eventually faced and overcome. It is true that too often one hears a muttered growl from the Russian bear, that one sees a tendency toward passive resistance; but in my observation the master-minds in this "great experiment" have their finger so closely on the pulse of the people, they know so well the psychology with which they have to deal—so many of them being of the people—that they are able to cope successfully with these emergencies as they arise, by backing and filling. The advantage of a dictatorship is its capacity for quick action. The prohibition question, previously mentioned, is a case in point. The same quickness of action was evidenced last spring when the peasants showed signs of passively resisting further collectivization of their live stock. It is in this way that the fearful tempo of industrialization and mechanization is maintained at just that top speed which will not break down the people's morale—and no faster.

It has been my experience that the Russian worker can be trained to a job as well as any other person of similar mentality. To be sure, the word *nichevo* is heard often, too often; but, after all, the corresponding expression, "What the hell," is to be heard everywhere by those who are actively in charge of labor. Contrary

to the common supposition in this country, the present system in Russia does not completely dull initiative. A higher wage scale, with attendant increase of "power" and better living conditions, is always a lure for the ambitious individual there as elsewhere, but with modifications. To be sure, the system is designed to raise the *minimum* standards; and those who are satisfied with the minimum will have no incentive to improve their work. Recently piecework and bonuses, though taboo as capitalistic devices, have been reinstated—another surrender to the requirements of the speeded-up tempo of the Plan. Further, I have found the Russian worker to be at his best when assigned to a piece of work alone. The entire responsibility is then his. He cannot "pass the buck." Everyone can see the results for which he and he alone is responsible. Put twenty workmen on a job, and I grant that Russian love of sociability—the desire to talk, to sing, to smoke—will militate against efficiency. To change the temperament of an entire people in a short period of time is necessarily extremely difficult if not impossible. But it seems to me that in many respects they are accomplishing the impossible in Russia today. The adoption of American methods, the frequent use of such words as *Amerikansky tempo* and *fordismus,* which have become bywords throughout Russia, show that the psychology of a people can be altered. Personally, I found the Russians, all of them, eager and quick to learn, eternally asking about how things are done in America, and apparently "on their toes" to show us foreigners that they can emulate their American brothers in efficiency and ability to learn. I

leave the problem for debate by the respective exponents of the theories of heredity and environment.

There seems to be a commonly accepted idea in this country that the Russian workman is kept in virtual bondage—that he cannot change his employment or move from place to place. I have been asked over here if it were true that "squads of workers were watched by the military equipped with guns to prevent them from quitting their jobs." Nothing could be farther from the truth. I am not attempting to describe the conditions under which the former kulaks are employed. I know nothing at first hand about these conditions. But as for our workers at Asbest—and there are some 13,000 of them —I can vouch for the fact that there exists nothing even approximating forced labor. As nearly as I could dig out from our employment records, I should say that we have at least a 100 per cent labor turnover yearly.

It is this huge turnover of workers which constitutes one of the major problems facing the administrative heads of the trust today. At one period last fall we were running only between 50 and 60 per cent of the number of hands prescribed for that quarter of the Plan. There are several reasons for this condition of affairs. First of all, there is the inherent nature of the Russian people, who by temperament love to travel. Next, there has existed a shortage of commodities, and the worker has therefore had few other uses for his accumulated earnings. Lastly, there has been such a shortage of labor available for the tremendous efforts required by the speeded-up Plan that competition between trusts for workers has resulted. One need only pick up the daily papers, particularly in such a place as

Sverdlovsk, which is the industrial center for a large region, to see columns of advertisements wherein this or that trust is bidding for labor. This holding out of special inducements, such as higher wages and better living conditions, finally forced Moscow to prohibit such methods of drawing workers away from their present employment.

The same condition exists among engineers and skilled labor. It is true that technicians are supposed to sign an employment contract, usually for two years. However, there is a large turnover with this class of labor as well as with the actual hands. An engineer's wife may find it preferable to live in Moscow or Leningrad rather than out in the Urals at the mines, or the engineer himself may receive a call from some comrade in another trust offering better terms of employment, and so on. Whereupon he will arrange for his release or transfer. Recently, however, this condition became so acute that all technicians and office workers have been asked to sign a pledge that they will remain at their present jobs until the end of the Plan.

Now let us follow the daily life of the worker. As previously stated, he works under conditions of safety and hygiene laid down strictly by the national code, enforced and modified to meet local conditions by the contracts between the individual trade unions and the respective trusts. These conditions are further controlled by frequent visits of delegates of the Workers' and Peasants' Inspection.

At Asbest the earlier large, non-private barracks have almost entirely given way to new multi-family apartments. These are, for the most part, two-story

houses, built of wood, semi-fireproofed by stuccoing inside and out with asbestos plaster, and then whitewashed. The rooms are light and airy and of sufficient size to accommodate two, possibly three, persons, allowing four square meters per person. Latrine, bath, and lavatory facilities are provided. There is usually a communal kitchen on each floor, accommodating, I should say, up to four families. Large built-in brick stoves for baking are provided. However, the Russian worker seems wedded to his "primus," a spirit stove with a special burner and air pump which provides a quick hot flame.

I have heard it said that in the past the Russian peasant and worker, especially the latter, tasted meat probably not more than twenty times a year, on saints' days or other festive occasions. His main diet consisted of a thin barley soup, cucumbers, potatoes, cabbage, and bread. Butter, sugar, and coffee were unknown luxuries. Today, although it is true that in the cooperative stores the quantities of commodities which he can buy are strictly rationed, this rationing has been so adjusted as to give him as fairly a well-balanced diet as possible. The heavy worker is, for example, allowed a greater quantity of meat, butter, and sugar per month than the one engaged in light manual labor or office work. Generally speaking, our workers at Asbest are rationed on meat, butter, eggs, sugar, coffee, cocoa, milk, and white flour. They can obtain cucumbers, cabbages, potatoes, black bread or meal in practically unlimited quantities. In cold weather, when transportation of perishables is possible, the diet is further varied by freshly frozen fish, which is supplied in large quantities.

Smoked fish is nearly always available, as is cereal coffee; *mokko*, a caffeine-bearing drinkable, being imported, is to be had only in limited quantities. In 1929 the co-operative stores had their shelves loaded with all sorts of edibles. Roast goose, chicken, and duck, fresh and salted caviar, pickled meats, conserves (canned goods), cocoa, and chocolates were to be had. In 1930 these commodities were rarely or never seen. Their disappearance was due to the breakdown of commodity prices on the world markets accompanying the world-wide depression, which was not attended by a corresponding reduction in the prices of such manufactured articles as machinery and the like. Since the Soviet Union had, under the Five-Year Plan, to import a specified quantity of the latter, for which they must pay by exporting, in the main, raw commodities, it followed that with falling prices for their exports the amount which they had to ship out in 1930 far surpassed the figures laid down when the Plan was originally established and the world depression not anticipated. A shortage of many commodities ensued, and this in turn resulted in an accumulation of money by the peasants and workers and its consequent withdrawal from circulation. This produced inflation, since the flood of rubles paid to the peasant and worker did not return to the State Bank through the ordinary trade channels. To increase sales of such manufactured goods as radios, electrical appliances, clothing, and sporting goods, the salespeople are now stimulated to greater efforts through commissions on sales (communism?). In this way money will revert to the State Bank, and slowly but

surely the present inflated condition of the internal currency is hoped to rectify itself.

So, although the worker is subject to food rationing, he can by no means be said to be kept at the starvation-point. Far from it. Furthermore, everything is being done to encourage the worker and his family to eat at the state-operated *stolovarias* (restaurants or cafeterias). Here he gets an ample meal for very little money. For example, at Asbest or Sverdlovsk a typical meal might consist of a fish or meat soup, always served with hunks of fish or meat in it, a fish or meat stew with rice, potatoes, carrots, black or perhaps "gray" bread, a *sliatky* (sweet) such as pudding or gelatine with conserves, and finally tea. Butter and sugar were "deficit" commodities and not served, but in January, 1931, they again began to make their appearance. Such a meal would cost sixty to seventy-five kopeks (about thirty cents on a gold basis). In addition to the cafeterias, restaurants, and hotels, all of which are run by the state, there are mechanized bread and cake bakeries often of the most modern type, where food is also served. Finally, nearly all the workers at Asbest may augment their food supply by produce from their own gardens and by purchases from the peasants who come into the "bazaar" daily to sell their surplus; but at open-market prices.

Very interesting to me were the special restaurants for children only. Milk, eggs, cocoa, cereals, and the like are usually available in these special eating places for children. I was also interested in the apparent lack of certain vitamin-producing foods and, following the shortage of live stock which resulted from the resistance

of the peasants to too rapid collectivization in the spring of 1930, the shortage of fats. Nevertheless, one thing which impressed itself strongly upon my mind was the healthy appearance of the children, whether in the cities or in the country. The enforced educational system which affects every person in Russia under the new literacy laws stresses child welfare and hygiene. Children certainly are not being neglected in the Soviet Union.

The illiterate workers as well as the children are compelled to attend school. Practically all the mills and factories are equipped with classrooms, and it is a fascinating sight to see the workers after their shift is finished—some of them with beards to their chests—pouring over their ABC's and three R's, *as well as the projectory of machine-gun bullets and the use of gas-masks!* The health and hygiene clinics also present an interesting aspect of life in Russia today. At Asbest three hospitals have just been completed, the largest with one hundred and twenty beds, equipped with the most modern surgical and medical facilities. In the cities the hospitals rank well with those to be found in any other country. An American engineer acquaintance of ours who had just come up from Georgia had his wife and child ill with typhoid in the hospital in Moscow. Though they were critically sick when they reached the hospital, the attention they received there was of such high order that they both fully recovered. My friend was loud in his praises of the facilities and the treatment. Even in small places medical attention and hygiene are excellent.

Drinking and drunkenness were still prevalent

everywhere I went in Russia. The government, through its state-trust distilleries, wineries, and breweries, now controls the manufacture and sale of all spirits. The beer is of low alcoholic content, probably not over 3½ to 4 per cent, and irregular in quality; the bottles are often dirty. The wines may be extremely palatable, and are labelled according to well-known foreign vintages. The worker, however, contents himself mainly with beer and vodka. *Kvass,* a mildly fermented cereal beverage, is widely consumed and corresponds roughly to our near-beers. Vodka is a generic term. It may be distilled from wheat or other cereals, from apples or other fruit, from plain sugar, and so on. It is practically the same as grain alcohol, was formerly sold at 180 proof or higher, and now averages about 40 to 45 per cent alcohol by volume. The better grades are not bad, to our taste; *zubrovka,* for example, having a delicate taste of the sweet of buffalo grass from which it derives its name. The ordinary types, however, such as are supplied to the workmen (but not on pay days!), are quite as unpalatable as our grain alcohol and are usually drunk with a bit of citrus rind or apple therein. Tremendous educational efforts are being made to eliminate drinking from the life of the peasant and worker. Everywhere, in every station, every hotel, every factory, one sees forceful posters depicting some phase of the drink evil. Most of the younger generation won't touch alcohol in any form, and I have seen the Young Pioneers (the Communist Boy Scouts of Russia) many times attempting to restrain some grown-up from overindulgence.

At Asbest there are three movie houses, or kinos,

as they are called. When these are not being used for the frequent meetings or for GPU trials, and "spectacles" in which the worker shows off his histrionic talents, one can see movies, occasionally good ones. They are of the silent type, usually of a revolutionary or propaganda character, and at times outstanding in technique. The acting is invariably of a high order. The one "talking" attempt in Moscow and Leningrad (Soviet patents) was excruciatingly bad.

CHAPTER THIRTEEN

THE GPU IN ACTION

IN THE two previous chapters I have attempted to give a concise, kaleidoscopic *résumé* of our impressions those first days at the mines—particularly in regard to the organization of the Soviet trust for which I was working and to the worker with whom we came in daily contact. I am going to leave the abstract and return to the narrative.

Our first impressions had crystallized. Svedberg had been induced into introducing me to the technical personnel and showing me each mine and mill. His instructions were to answer my questions, show me everything I wished to see—without reserve. The technical director, whom we had met and talked with at Moscow, had not yet put in his appearance at Asbest. As day after day passed, my wonder grew at his continued absence. My wife and I discussed the matter nightly. Why was he remaining away? Was he being detained purposely? Why, since he was to a major extent responsible for the expensive and elaborate underground (as op-

posed to cheap opencut or quarry) methods of mining which were just even then completed; since he, too, was the sponsor of the new, huge mill which was already more than half rebuilt; since he had to so large an extent supervised the 15,000,000 ruble outlay—why was he not present personally to show me around the works? Why was he not there to explain his reasons for everything he had done? Reasons and good ones there may have been.

But there was something in the air. As I studied the geology—on the ground, from the up-to-the-minute maps, from the extensive diamond-drill (prospect borings) records—I became more and more astounded at what had been done. Every day, as under Svedberg's guidance I covered mine after mine, covered every square meter of productive ground, I became more perplexed as to why one of the costliest, one of the most complicated, dangerous and, in those Siberian winters, one of the most ineffective mining systems should have been installed. I was told the cost had run over five million rubles. Great quantities of import material (which means dollars, not rubles!) had been needed for the mechanization of this greatest of many mines under development. Two electric shovels—it seemed to me and so was proven after the recommendation had been adapted—with a minimum of dead work, at from one-twentieth to one-tenth of the cost, would have given far better results and cheaper ore.

Here again I saw an example of that peculiar quirk in Russian psychology. If it's too simple, it can't be good. The Russian has an inborn love of the complicated and the grandiose. Along with a morbid self-pity

and sadness, it is the great outstanding characteristic of the people. I soon discovered during my work for the Soviets that an American engineer makes a great tactical error in suggesting anything too simple. It was always more impressive—he was almost always more certain of getting his way—if he "went into a huddle," produced reams of calculations and data which, being in technical English, was incomprehensible to his colleagues, and then came back to the original simple idea. But most American engineers, myself included, have not the political temperament for such chicanery. We go about on the job, making quick sketches, using our slide rule and handbooks for equally quick empirical results based on practical experience. Most of us, if we are any good, know instinctively what to do and when to do it. We turn over our major ideas to a corps of draughtsmen and detail men. We supervise their work.

Not so the Russians. Let me take two concrete examples, one from my own experience, the other from a story told by an American working in the Don Basin coal mines.

The drying of asbestos rock after the mining and crushing operations, but before the milling, is a more or less delicate and important operation. Too little removal of surface moisture prevents the extraction of the fibre, with attendant loss in values. Too much drying, at too high a temperature, may to some extent dehydrate the water of crystallization from the fibre, with resulting brittleness and loss in value. After years of practical experimenting in the Quebec district concurrent drying has been agreed upon by most operators as the better. By this is meant that the hottest gases from the combus-

tion in the fuel chamber strike the wettest rock and pass through the dryer in the same direction of flow as the rock. The Russians had adopted just the converse, which meant that the hottest flame hit the driest rock, where little if any moisture remained to protect the fibre from "scorching."

We had a series of intense and eloquent sessions debating this point. I had to defend my stand against the assembled thirty or forty technical (and some not so technical) men gathered in conclave. The meetings would last from six or seven in the evening into the small hours of the morning. I would smoke like Vesuvius, drink tea until I felt like a human tannery, and then in a few words explain the practical idea back of my recommendation. The Russians had come armed with page after page of calculation ad voluminous reports. Each man present had to be heard, whether he knew anything about the subject or not. He was called on; he felt he must speak. One chap who had slept throughout the entire previous discussion, when called upon, jumped up, whipped out his papers, and went to it, only to lapse again into a moribund state from the effects of the hermetically sealed room, forty men smoking, and probably the discussion itself.

Theoretically, they were right. The thermal efficiency was probably all in their favor. Their beautiful calculations proved they were right by all the laws of thermodynamics. How could one refute them? But in practise they were wrong. And when in late 1930 the president arrived back in Russia after visiting Canada, nothing but concurrent drying was the answer! Nor would he brook an argument. Nor did he care that the

forty engineers had overridden me. Nor did it matter that they had passed a formal *protokol* and made their *daklat* (report).

The other story concerns a prominent consultant who was showing a *Kommissii* around the coal mines. They were standing on a haulage slope. They asked the American. "Mr. Roe, what degree is this slope? What size locomotive do you recommend and how many cars of such and such capacity will it haul?" The American studied the problem for a few seconds, then answered almost intuitively: "I would say this was an incline of —— degrees. I recommend such and such a locomotive. It will haul so many of those cars, under these conditions." The Russians noted down everything. Two days later they met the American. They were loud in their praises. They appeared dumbfounded. "How is it, Mr. Roe, that it took three of us two days to calculate, after taking careful measurements, what you did mentally in ten seconds?" Roe answered: "It didn't take me ten seconds. It took me twenty-five years!"

So, as I examined the plans, flow sheets and calculations for the new *Gigant* mill, then uncompleted but under construction, I found that every single step in the flow of the ore through the plant had been calculated with utmost precision—the percentage of this, the percentage of that, presented in a couple of hundred pages of computations. I had never seen anything like it before as applied to asbestos. I felt it just couldn't be done. It was all pure theory. Too many indeterminable factors. The figures had been worked out to the second decimal place. Yet, on our later trip, when I saw the mill faltering along in semi-operation, I found that we had been

right. The figures were out, not in decimals, but in *dekamals*. So it is—working for the Soviets.

A really remarkable interpreter had been located in Sverdlovsk for us. He was regularly attached to the O.S.N.K., the District Council of People's Economy. He was an economist, a good one, a practical one. He had a mind like chained lightning. He knew seven or eight languages, not stutteringly and ungrammatically, as I my three or four, but fluently.

They had given me immediately upon my arrival a formidable questionnaire, question after question from the uncovering of an asbestos deposit to the last detail of the operations concerned with bagging the finished product. The answers—nearly one hundred pages of report when finished—formed a veritable monograph on both the abstract and particular features of asbestos mining and milling. My interpreter stayed all the time with us, living in the room next to ours and translating first the questions and then my answers. He did a wonderful job of it. His keenly analytical and almost photostatic mind so quickly absorbed and comprehended the subject matter that, in the debates that followed, he could answer the oral questions put me practically without referring them back to me at all. He was a godsend.

Later, when I had to write my reports and recommendations, first on mining methods, then on mills (building and to be built)—nearly another couple of hundred pages—he was forced to do his own work in Sverdlovsk and could come over only for a couple of days each week. He would take the script with him and translate in his "spare" hours.

His own work took him from eight in the morning

until five or six in the afternoon. It was the end of the fiscal year—October—and he had all the economists' work to do in connection with the Plan on not one, but on several, industries. He was also called upon to teach higher mathematics three nights a week at the University! That's also working for the Soviets! He was obviously under-nourished—evidenced by his gauntness to the point of emaciation. He was a bundle of nerves, he twitched continually. He had "Russian heart" from his sufferings during the post-civil war famine. But despite his obvious bourgeois origin—never a word of complaint, never a remark against the régime. We over here can never understand the fortitude, the long-enduring patience, and moral bravery of the Russian people.

I remember jestingly saying to one of my friends, "You Russians have no sense of humor." "No sense of humor," he replied, "you say we have no sense of humor? We fought in the trenches. We officers who were spared the mutiny of our troops found our way home—possibly hundreds of miles on foot—to wonder every moment of the way what had happened to our loved ones. We arrived there. Our family was scattered, some never to be found, others broken for life from fear and privation. We went through the civil wars, never knowing what side—the Reds or Whites—would pillage us next or make us swear allegiance under penalty of death. Then came the famine and the plague. We ate 'bread' made of sand and straw. Five millions died in one year. We burned our furniture trying to keep ourselves from freezing to death at forty below zero. Then the reconstruction—our property confiscated or looted, ourselves disfranchised, finally refranchised, working for the

Soviets. We never knew when the hand of the GPU would reach out and take us. But here we are, working twelve, fourteen hours a day; eating our rations ravenously, getting some two hundred, some eight hundred rubles a month; forced by public opinion, lest suspicion fall upon us, to subscribe to internal loans, to raffle tickets to build dirigibles, or to buy a Ford for our Trust; buying shares of the co-operative stores in order to be able to get our rations there; supplementing these with purchases on the open market at ten times the gold prices. Yet you see us, my friend, drinking our vodka, playing our guitar, balalaika or accordion, dancing, singing, joking. We know not what to-morrow will bring. There may not be a to-morrow for us. Yet you say we Russians have no sense of humor?"

He was gone when we returned the following spring. Nor could, or perhaps I had better say, would, anyone tell us what had happened to him. We did not see him again.

Life soon became organized for us. The days slipped smoothly by. I breakfasted with Svedberg at a little before eight. That was for him merely tea—for me a routine American repast. At eleven or eleven-thirty, after making a study of some mine or plant, or testing in the laboratory, or poring over maps or plans, we would return for *zoftrig* (lunch). At three-thirty, possibly four, we were finished. Then dinner, an elaborate meal. They had bought a dozen live turkeys and an equal number of ducks, geese, and chickens in preparation for our stay. This meant we lived well—too well. Once a week, duck, once goose, once chicken, and so on. Everything was very richly prepared, oozing with butter, too

rich, perhaps, for our simpler American tastes. Occasionally we would have a tiny suckling pig, roasted whole. It was just a bit too realistic for us animal lovers. Delicious pastries. Soups, with the ever-present hunks of meat, and often with sour cream. *Blini*, with sour cream and caviar on top. Again, beef *à la Strogonov*, perhaps Siberian meat-balls.

These latter were a remarkable concoction. The Siberians out on a long winter's trek would take a gunny sack full of these balls—a sort of soggy dough enclosing highly spiced chopped meat. These would be allowed to dry and freeze as hard as pemmican. They would keep indefinitely, and needed only to be dropped in boiling water to make a most nutritious and sustaining food. Even freshly made, they did not appeal to us.

How well we were catered to is evidenced by the account the Trust handed me for my wife's board at the end of our stay. (My expenses were charged to Uralasbest, but I undertook those of my wife.) Even with the uninflated prices of the time, even with the live stock purchased at really low cost, and the frequent game we would get from the peasants, the average daily cost per person was 10 rubles 44 kopeks, or $5.22 for raw food alone!

After this early-afternoon dinner my wife and I would stroll about the camp taking pictures, moving and still. Our apparatus always aroused the greatest curiosity and admiration from the host of children and grown-ups following us. *"Amerikansky apparat? Da? Stot aquoi? Kino-apparat! Perkrassny!"* A movie-camera, wonderful! And the women would jabber like monkeys at my wife's breeches and laced boots. When

she wore the one dress she had brought to the mines, with her beaver coat, passage became impossible. Women and men alike would sneak up for just one feel of the material. Children would plague us in droves. Two words alone would drive them away—*parasonik* and *ibisiano,* the former meaning pig, the latter, monkey. From these they flee helter-skelter, permitting us to continue our walk in comparative peace.

We would watch the peasants selling their live stock, eggs, butter, *oogaritzi* (cucumbers), and bread (always by weight); at the bazaar watch the cobblers at their benches in the open, and go to the co-operative store to buy knickknacks or cigarettes. The stores were laden with commodities at that time. There was everything in the way of foodstuffs. Red caviar at a ruble-fifty a kilo (2.2 lbs.), the rich grey at three; a roast duck at a ruble and a half, cocoa; coffee (they call the caffeine-bearing bean *mokko,* always mixed in the making with chicory which is purchased separately in lump form); wines; candy (expensive, a couple of rubles for a quarter of a pound, even at that time). There were goat-trimmed and fleece-lined coats at a hundred or a hundred and twenty rubles each; boots, thirty or forty rubles, but of good, solid leather, well-made; goloshes; hats of cheap fur, the expensive skins all going for export; and so on. Cigarettes, the 24 kopek sort for 25 pieces—*paperosi* they are called because of their paper mouthpieces—could be bought by anyone in unlimited quantities. The better brands then selling for 65 and 75 kopeks a pack of 25, as well as the better wines, were brought over from Sverdlovsk for us by our interpreter.

These, being of the export quality, were not always purchasable, even at that time.

Occasionally we would follow one of those impressive Russian funerals. Always an open, shallow, wooden coffin, the body slightly raised so as to be completely visible—unenbalmed, I believe. A red flag precedes the cortege. Four pallbearers, possibly six, in rare cases horses to draw the catafalque. The straggling mourners behind. Always the slow, beautiful cadence of the Communist funeral march which, when well-played, is one of the most heart-gripping pieces of music in the world. Its solemnity is beyond description, even transcending Chopin's. But with a mine-workers' band, the effect was too often more ludicrous than otherwise.

Sometimes we would go hunting with some of the German engineers employed on the mill construction. Once or twice they got a crack at one of those peculiar wild-turkey-like birds called, in Russian, a *glukcha.* I never saw anything quite like them anywhere else. They weigh eight or ten pounds apiece and are nearly all juicy, tender white meat. When our Teutonic colleagues began losing patience at the scarcity of game and started in on woodpeckers and rabbits (I've shot big game in both the Americas, but a rabbit is still a "bunny" to me), we quit "following the hunt." Due to large-scale opencut mining operations entailing so much blasting, larger game could not be had at less than possibly fifty kilometers from Asbest. Here one got bear, moose, wolves, and the like.

We loved our horseback rides across the tundra and through the beautiful evergreens. In the fall the wild flowers beggar description and after a hard ride we

would let our horses graze and dive into the cool waters of the stream; after drying in the sunshine we would pick a huge armful of flowers and ride home for a "tea" of eggs, cold cuts, caviar, smoked fish, cakes, and glass after glass of tea. We might conclude with a thimble-glass of vodka with a bit of apple or lemon peel in it. Then either back to the office of the Trust or to my desk at Svedberg's. Sometimes, when no work was to be done, we would spend the evening playing chess with our host or with one of the German engineers visiting at the house. Never once did we see the president "socially," seldom even, those first weeks, on business.

Svedberg had only one real love in the world outside of his family. That was his work—asbestos technology. Every scrap which he could find in periodicals or books, whether English, French, or German, he would pore over, abstracting here and there. He was immersed in it. He steeped himself in it. He would talk of nothing else. We argued moot technical points pro and con at any and all meals and far into the night. It was then that we learned of his bad heart. He had had one "stroke" already; another would be dangerous, a third even more so.

He was such a sweet, old fellow. Everyone at the office loved him—everyone, it seemed to me, but the president and, when he returned, the technical director. Svedberg should never have been allowed to take me up and down the shafts. Not until much later did I realize the seriousness of his illness. One night he told me that as soon as the director returned, he was to take his holidays in the Caucasus. He was to take the baths, get a bed at one of the sanatoria—former summer palaces

taken over and made into hospitals with much of the latest equipment for special treatments. He was not a "worker," and thus did not get his transportation, bed and board, treatment, and baths free. But he had saved, scrimped, and drawn ahead on his salary. Because of the necessity of showing us about in the director's absence he had lost his "place" at the sanatorium. Besides, he was not a worker, not even a Russian, but a Finn. But *nichevo*—he would await his book, i.e., his permit, traveling papers, transportation, etc. It would come any day now. Soon he would be on his way to the sunny South—to the bracing air of the Caucasus and the life-giving baths and treatments which would "make his heart like new."

Two or three weeks after our arrival, the technical director returned. Instead of the expected cordial greeting he was like a lion in chains. Twice he took me around the works walking head down, his tall thin frame bent, hands behind his back. I had reserved any expression of opinion until I could discuss the problems involved with him; hear direct the whys and wherefores for what had been done. I felt that I must have missed some cardinal point in my first examination of the situation.

I soon knew that this man either feared or was jealous of Svedberg—his long experience with asbestos in Russia and abroad. I also realized that Svedberg had not fallen in with his plans. I could feel his fierce animosity, and could feel his suppressed anger that Svedberg should have been my guide.

From that day on, things became more difficult for me to see. On this or that pretext I could not get into this place or that—engineers would disappear before I

came to see their work, get their help, or interrogate them. The president hauled me over the coals one day for not having completed some tests. I explained how my every effort to have the tests run was obstructed. Even the geological maps were no longer available to me—I believe the pretext was that they did not wish "a representative of the capitalistic world" to know their ore reserves. The president raised almighty hell. The director came out of the conference white, tense, and obviously fearful. I was indeed in a quandary, torn between natural human feelings and my obvious professional obligations.

To make matters worse, the director took it out on Svedberg. To cap the climax, one day, after he had been particularly hard pushed by the director, the president too had his innings. "What, pay back your salary overdraft at the rate of sixty rubles a month. Nonsense! Ninety rubles a month. Not a kopek less!" With his finger constantly at the throbbing pulse in his throat, Svedberg came home from the office that day. Gone was his usual cheeriness, his hearty chuckle, his eager enthusiasm about the progress of my work. We did not see him that evening after tea.

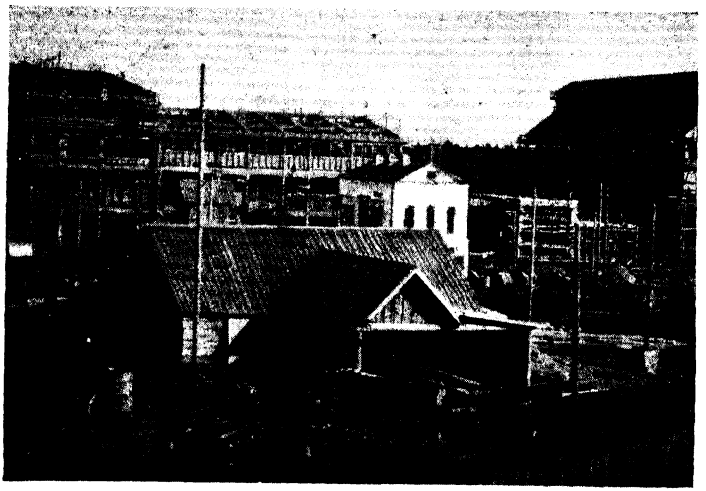
That night I worked on my reports far into the early morning. I had completed one phase of the work and would not be required at the office next morning. So it was a morning in for me. About eight o'clock I heard Svedberg slowly coming down the stairs. There was a pause, then a muffled groan, the thud of a falling body. Not even waiting to slip on a robe, I rushed out into the vestibule. There, grey-white as in death, his eyes rolled back, a thin, bloody froth covering his lips,



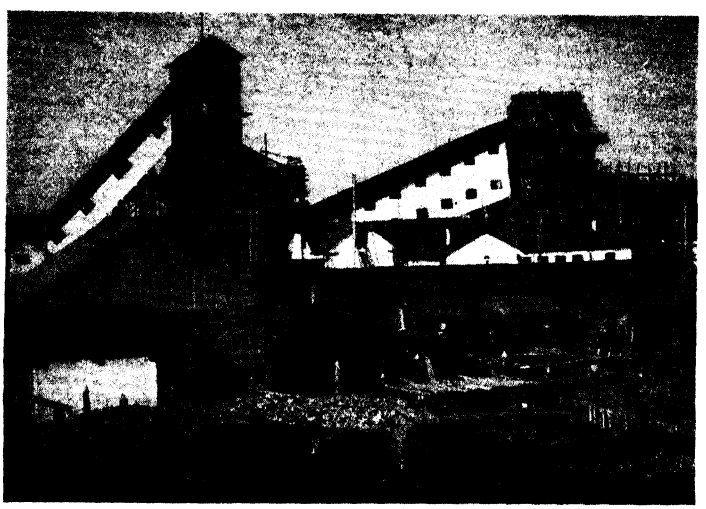
THE START OF THE DISASTROUS BURNING OF THE NEW MILL AT ASBEST, 1929. Three engineers were shot by the GPU as an aftermath



THE FIRE SPREADS THROUGH THE ENTIRE STRUCTURE. The burning of the original "Gigant" Mill, Asbest, 1929



PORTION OF "GIGANT" MILL AT ASBEST DURING RECONSTRUCTION AFTER FIRE



CRUSHING PLANT OF "GIGANT" MILL AT ASBEST DURING RECONSTRUCTION

lay our host and friend. Mrs. Svedberg and my wife came running to us. Confusion, frightened sorrow, but no hysteria. His wife rushed to phone for a doctor. None could be located—each was either operating or out on cases. My wife helped me in first aid. We ripped off collar and tie, loosened his shirt, trousers, and underthings. I stuck pillows under his feet. A good old American hot-water bottle was filled from the built-in tank of the huge brick Russian stove and placed at the soles of his feet, our ice bag, similarly filled and almost unbearably hot, placed under the heart.

In our ignorance I wondered whether we were killing him. But I had had some experience with heart sufferers before. We made a bed for him right there on the floor, and the attack was over an hour before the doctor came. By that time we had been able to give him a little stimulant. His pulse was becoming stronger and stronger. Finally, we were able to carry him upstairs and put him to bed. The doctor, in German, told us that we had done the right thing. But we were pretty badly shaken by the experience.

During his convalescence the GPU conducted the trial of the three engineers accused of counter-revolutionary activity in connection with the mill which had burned down just before completion. I believe some several million rubles had gone up in smoke. Although a portion of the plant had been built of concrete, to realize just what a blaze such a mill under construction would make, one must see the Russian methods of building. A veritable forest of scaffolding, temporary supports, forms, and the like entirely surround and isolate the structure itself. Shavings were everywhere. The

storage bins and other major features were of timber. Although the mill was nearly half a mile long, and the fire started at the far end in a pile of shavings (according to testimony, not only had workmen been seen smoking there against regulations, but a welding outfit had also been going), yet so rapidly did the holocaust spread that within two short hours there was not a single stick left standing within the entire area. The pitiable little "Toonerville" fire department, with only hand pumps and no water supply except pails and barrel-wagons, had no chance of putting out a blazing hell in such a wind. Yet it was rumored that the fire-buckets had been filled with gasoline! Possibly, but I doubt if anyone knows.

We peeked in at the trial for a moment. It was none of our business, but I simply had to see a GPU court in action. The *prokurateur* had come over from Sverdlovsk. Three judges seemed to comprise the tribunal, and the trial went on for days. Evidently everyone was fond of the three men fighting for their lives. Even the technical director, even the Communist president himself—so I was told—testified as to the conscientiousness of their work. One of them was considered perhaps the best construction engineer in Russia. But their "histories" were against them. One had been an officer in the White Army, another had been with Kolchak, and so forth.

The sentence was death by shooting.

Later, the case was appealed to the high court in Sverdlovsk, where the verdict was sustained. Still later, with the condemned men's wives fighting for them like Trojans, the case went to Moscow. The sentence was

again upheld. The GPU swallowed them up. A German in Sverdlovsk told me that, as is usual in all such cases, the newspaper had merely a little item—"December 31, at midnight, the death sentence by shooting was carried out on Engineers so-and-so by the GPU."

There are two peculiarities of these GPU sentences. First, it is said that the convicting prosecutor must execute the sentence himself. Second, the condemned are not lined up against a wall to be shot. They are led from their cells ostensibly for another interview or "third-degree" on the famous "conveyor" system. As the doomed man, all unknowingly, marches between his guards, he is shot as mercifully as possible—the bullet usually goes into the back of his neck at the base of the brain.

A third peculiarity about these sentences is significant. Notices in the papers notwithstanding, oftentimes the sentence has never been carried out at all! (I do not refer to open commutation or pardon.) Officially dead, the prisoner still lives to continue his work for the Soviets, abiding night or day in the GPU dungeon and working the rest of his time. Good experienced native engineers are now too scarce in Russia to keep shooting them promiscuously. They must be kept working for the Plan.

In all fairness, I must add that whenever the GPU strikes, it is usually with reason. Perhaps the accusation is trumped-up or exaggerated; perhaps the particular incident leading to arrest is but a pretext. Yet, behind these possibly flimsy excuses, the GPU is practically dead-certain that the accused was engaged in activities against the state. When they do strike, they

strike sure and hard. Their case is practically watertight. If the charge is a minor one and the man repents, he is released. However, many of the condemned men have admitted fully and unrepentantly their counter-revolutionary activities and flagrant sabotage. Without the GPU, there would be no Communist Party in Russia today, no Union of Soviet Socialist Republics. Spies are shot in time of war, and Russia is admittedly at war. In Russia the greatest crime is justly that against the State.

A week or so after the trial, I sauntered into the Trust's main office and started to smile my greetings to everyone. Then I noticed a ghastly quiet about the place. No one looked at me. Around the desk of the office manager were seated a group of uniformed GPU's conversing with him, seriously but quietly. Slowly they all arose. He was trembling slightly, his face ashen. He got his desk in order. They all departed. Another gone. And soon after that another and still another. Even two of the wives of the condemned engineers. The entire business was getting on our nerves pretty badly. My wife, who outwardly maintains her calm, feels such incidents too deeply. With my work to distract me to some extent, I nevertheless was also deeply moved. I could well imagine my wife's reaction.

The time approached for Svedberg to depart. My birthday intervened. My wife insisted that she make the laborious trip to Sverdlovsk to buy me some sort of a memento and to do some special marketing for the event. The trip entailed riding on the narrow gauge which left the mines at four in the afternoon. The trip in those overcrowded, smelly, one-candle-lighted box

cars would take better than two hours. If anything went wrong, which happened frequently, it might be four to six hours before she arrived at Bajenova. She must go to the little "hotel," kill the evening from six-thirty or seven until bedtime with strange people sleeping all around her. A cold lunch must be taken along. Then she must try to catch some sleep without disrobing, sleeping four in a room which lacks air and very probably resounds with snores. At six in the morning, at that time of the year, still dark, she must be ready to take the train to Sverdlovsk. After more than two hours in those wretched triple-tiered cars, she would arrive at the city about nine. There would be no place to breakfast, since foreigners without rooms at the hotel cannot get breakfast at that time of the morning.

Mrs. Svedberg went with her, though neither spoke a word of the other's language. But women seem to have the knack of making themselves understood to each other; they get to know the meaning of each gesture and tonal inflection. The Trust had placed its suite at the hotel at their disposal, as the return trip would be too much for the same day. My wife heard of the beautiful cut-stone work done in Sverdlovsk and had an onyx desk set or something similar in mind as my gift. But she found absolutely nothing of that sort—only little grey marble statuettes, rather cheap in appearance. She bought me a Boy Scout knife with all sorts of gadgets on it, Soviet-made. In less than two weeks the blades had snapped.

At eight in the evening both women were exhausted from their trip and the endless tramping through the muddy streets. They found the suite vacated and await-

ing them. They immediately fell into the deep sleep of exhaustion, each on one of the two hard, uncomfortable cots which the bedroom afforded. About nine-thirty they were awakened by voices of a man and a woman in the sitting room. The man came into the bedroom and snapped on the lights. It was the president of the Trust. He saw the two women occupying the suite's only beds. Then and there my wife learned why he was nicknamed the *isteritscheskia dama.* He fumed and cursed in Russian; he paced the room; he raved and ranted; he pulled his beard, his face a deep crimson. He pounded with both fists on the foot of the beds. His wife tried to calm him, talking to him as would a mother to a spoiled, bad-tempered child. He would not listen.

Mrs. Svedberg and my wife, now thoroughly awake and calmer after their first fright, could do nothing but pull the covers over them. P—— had no use for women who didn't work—who were merely housewives. I noted that he appeared actually to hate Svedberg, who had worked for the former private, aristocratic owners of the mines. His rage now completely out of control, he bodily lifted both the women out of their beds and ejected them from the room. My wife spent the night huddled on a hard, plush-covered settee, Mrs. Svedberg on a couple of chairs in the living room. Later, after the storm had somewhat subsided, the "first lady" of the Trust graciously offered one of the beds to my wife. She and her husband would sleep on the other. As the room was not over eight feet wide and the beds were almost touching, my wife preferred the settee.

I was dumbfounded when I learned of the incident. But, as we thought, such a short time remained of our

trip, we decided to forget the matter. Nor did we ever discuss it with anyone. It was only in January of this year, when the president's actions had gone beyond the limits of tolerance, that I reported the incident both to the GPU and to the Peasants' and Workers' Inspection.

The day came for Svedberg's departure for the Caucasus. The air was charged with excitement. The old chap had donned a golf suit of heavy Scotch tweed which he had purchased before the War in England and had been nursing for just such special occasions as these ever since. I contributed a pair of golf stockings. Early that afternoon, very smart in his tweeds, a German hunting hat cockily bedecking his massive head, beard trimmed to perfection, and a heavy walking stick completing the picture, he and Mrs. Svedberg departed for the train. She was to see him safely aboard for Moscow the following afternoon. Not the Express, but, at any rate, a "fast" train. We had given her all sorts of orders for cigarettes, wines, candy, and the like. She was to return the night of her husband's departure from Sverdlovsk. Musa and *Babushka* remained behind.

The next day passed. The night train pulled in from Bajenova. We had all gone down to meet her to help with the parcels. She did not arrive. That meant nothing. The Trans-Siberian train could easily have been so late as to have caused her to miss the local. The same thing happened the next day. And the next. We were out of good cigarettes and were a little hurt that, if she was remaining in town for a few days, she had not at least sent our parcels with the daily courier of the Trust.

We ceased going down to the train. On the fourth or fifth day, some few minutes after we had seen the light on the train as it pulled into Asbest, we heard the door open and a woman's quick step going upstairs to the Svedbergs' quarters. It was Mrs. Svedberg. But why had she not stopped to greet us? It was all very mysterious and boded no good. Later we heard the anguished sobbing of women whose hearts were breaking, the low mumble of broken talking. By this time we knew something dreadful had happened. Much later, Musa, her face red and swollen from much crying, came down to us. Brokenly she sobbed out her word or two of German, "Papa . . . GPU . . . Papa, *liebschen.*" Then we knew what had happened. We went up to try to comfort the bereft woman, but the doors were locked.

Later we learned the story. The Svedbergs were sitting in the station waiting for the Moscow train, happy because of this long-awaited opportunity to help restore the old man's health. Two uniformed GPU officers approached them and bade them both to accompany them to an awaiting car. The indignity of the usual sealed van was spared them. This was an open touring car. Soon they were in the GPU headquarters. A matron led Mrs. Svedberg to another room. Each was searched minutely and the baggage confiscated. Svedberg was held, though no one knew the charge. Mrs. Svedberg was released.

We never saw the old fellow again after he left the house—so happy, just like a kid out of school, with never an inkling of the fate which awaited him just around the corner. His wife's grief was horrible to see. We were all crushed by this act of the GPU which had

struck the home into which we had been taken as members of the family.

Next day the office was buzzing with the news. No one could understand why the police had not waited for our departure which was scheduled comparatively soon. Why parade their methods before the foreign consultant and his wife, newcomers to Russia who were so soon to return to America? I suppose they thought that with Svedberg so ill and weak, his resistance to their questioning would be lessened. Besides, he would have no opportunity to report at the Finnish consulate in Moscow.

We wondered at the cause of the arrest. Had he become too friendly with us? The censors undoubtedly knew of the financial distress of the daughter who was studying in Berlin. She had written him. Did they suspect that he had plotted with the former owners of the mines upon a recent trip to Germany? Had they suspected him of accepting help from us? Was this some of the technical director's work? The president's? Had the incident in the hotel in Sverdlovsk precipitated the tragedy? No one was ever to know.

Two mornings later, as I was dressing, there was a knock on the kitchen door. I admitted four or five of the GPU. Two soldiers were in uniform, the "brains" were not. They apologized profusely for the intrusion. One addressed me in fluent German. Could they come in? It was their unpleasant duty to do so. They spent a couple of days searching the house. They went through every page of every book in Svedberg's large library. They went through every paper, every letter, looked behind the pictures, under the rugs, everywhere.

They took certain papers and, bowing graciously, quietly left. To our knowledge they had held our quarters inviolate.

Mrs. Svedberg went in to Sverdlovsk weekly to take her husband food and to collect his laundry. She never saw him, but always received a scrawled note that he had received the food. His linens appeared as though he had been dragged through a coal-heap. What had they done to him that his linens should be so filthy dirty?

We wondered how his poor old heart could ever withstand the ravages of the "conveyor system." This is the "third degree" par excellence. For three or four days and nights on end, without being permitted one single wink of sleep, the prisoner is interrogated by different officers working in unbroken shifts. A powerful light is made to play upon the top of his head. The questions are disjointed and apparently without purpose. Psychological torture of the most refined sort. I sometimes passed the offices of that dreaded organization in Sverdlovsk. The cellars formed a dungeon prison. All windows were heavily barred. A high brick wall screened what formerly must have been a garden, perhaps a garden of death now. I thought of Svedberg on these occasions, wondered if he was lying there, separated from me by only a few inches of wall.

Upon our return to Russia the following year, we heard that Svedberg had become critically ill and had been removed to a hospital. The Finnish consulate interceded in a half-hearted sort of way. The GPU never brought him to trial nor published the charges. They had offered, we were told, to exchange him for a Russian Communist imprisoned in Finland. For some rea-

son, perhaps because he was old and broken, the Finns never went through with the deal. He was taken to Moscow, still practically under arrest, Mrs. Svedberg accompanying him. He was returned to Sverdlovsk and died in the hospital there.

We had seen the GPU in action!

CHAPTER FOURTEEN

A NEW CONTRACT

AFTER THE arrests by the GPU our life soon returned to the usual pace. The air of tragedy at the Svedberg home was to some extent alleviated by the constant hope of his immediate release. Further distraction was afforded by the arrival of a German engineer, who had been employed by the Trust as a steel-concrete detail man. No hotel being available at that time, and individual quarters being equally scarce, he was quartered at Svedbergs. The office asked us if we would mind giving up one of our two rooms "for a couple of days" until an "apartment" could be arranged for the newcomer. Not knowing Russian methods at that time, we naturally acceded.

The newcomer occupied the room between us and the bath, between our room and all the other facilities. We had to pass through his quarters every time we wished to enter or leave our own. We remained up late every night, I of necessity working. He retired very early. Furthermore, this particular German, unlike the

others we had met at the mines, did not boast the most agreeable disposition in the world. It was not too pleasant and after a couple of weeks became almost unendurable. The situation was further complicated when our interpreter made his trips to Asbest from Sverdlovsk. This meant much intensive night-work on both our parts, and he had to occupy a cot in the German's room. I complained to the office, but to no avail. No other quarters were available.

Then, two of the Humboldt engineers, also Germans, were added to our family party, and finally an extremely likable young chap on leave of absence from Krupp was quartered in the upstairs living room. This meant that we were now absolutely confined to our one room, combined living and sleeping quarters. None of the newcomers spoke English, and neither my wife nor the Svedberg women spoke German. It was a peculiar household. I could see that my wife's nerves were pretty badly frayed by this total lack of privacy and this constant jabber in a foreign language. I could appreciate how she felt. I could at least understand and participate in the conversation.

The October celebration of the 1917 Revolution is celebrated November 7, due to the change from the old Russian calendar to that generally in use throughout the world—a difference of thirteen days. It afforded a genuine welcome break in the monotonous routine of our lives. We no longer looked upon the walk to the bazaar as interesting—"full of atmosphere." The visits to the co-operative stores were less and less frequent and only made upon necessity. We no longer were able to anticipate with interest anything which threw us in

contact with the peasants *en masse*. The American never can become accustomed to the odors and mauling; even though at first, when everything is all new, his interest in novelty may act as a temporary anaesthesia to his senses.

Even our periodic trips to the *bania* became routine. At first we had greatly looked forward to our "turn" at the Russian bath. This was located in a little log hut, just to the rear of our quarters. To save time, my wife and I would take the "bath" together. A woman attendant was typically naïve about her services. She fired the "Dutch" oven which nearly filled the little room and kept the rocks placed in it to retain the heat, white-hot. The wood was placed in the fire box from without. One came in from the bitter cold of the Ural winter, 30, even 40 degrees below zero, possibly waited around in the cold for half an hour or so until the bath was free, and then immediately became immersed in the extreme heat of a typical Russian bath. One would strip, enter the hot-room, which was hermetically sealed, yet provided with two windows so that passers-by could have full benefit of the view. But there seemed to be an unwritten law about "peeking." At first we used to throw ourselves flat on the floor upon hearing approaching footsteps; later, as we learned the *noblesse oblige* which prevailed, we took our chances as everybody else.

After possibly half an hour at some 140 degrees or higher, we would take a bucket, bail out pailfuls of the cold water just taken from the frozen lake, and pour these over each other. It made every nerve tingle and hardened one. Then, usually still perspiring profusely, we would hurriedly dress and again go out into

below zero weather. We never caught the slightest cold from this procedure. The Russian bath, even when most primitive, is a great institution.

We went with some of our Russian friends to the celebration. The then new five-day week had just been inaugurated. There no longer was any universal free day. These three days were the only holidays throughout the entire year which all the Russians could "enjoy" simultaneously. For these three days, even the plants were shut down. But one had little time to do as one wished. For weeks the office staff had been working on a *spektakle;* everyone with any sort of histrionic talent had to do something in this show. There was endless parading, continual meetings, the reading and discussion of annual reports, résumés of what had been done to date under the Plan, and "pep meetings" of every sort and description. To us it was positively bewildering.

The last night we attended the festivities. First we went to the offices of Stroi-Uralasbest, the construction unit of the Trust. Here the workers were holding their celebration. There were long-drawn-out speeches, with references to the *bolshoi Amerikanski spesialist.* Upon hearing these three words, a cue given me previously, I would arise and bow, with not the slightest idea whether bouquets or brickbats had been thrown at me. Then came the workers' dance. It was the only occasion that we witnessed what we in America are pleased to call Russian dances. We learned that they are actually Ukrainian, not Russian, yet fascinating in the abandon of the tempo. There were workers' quartets—splendid singing, perfect harmony. We had heard the men and women harmonizing at their work. Then it had been

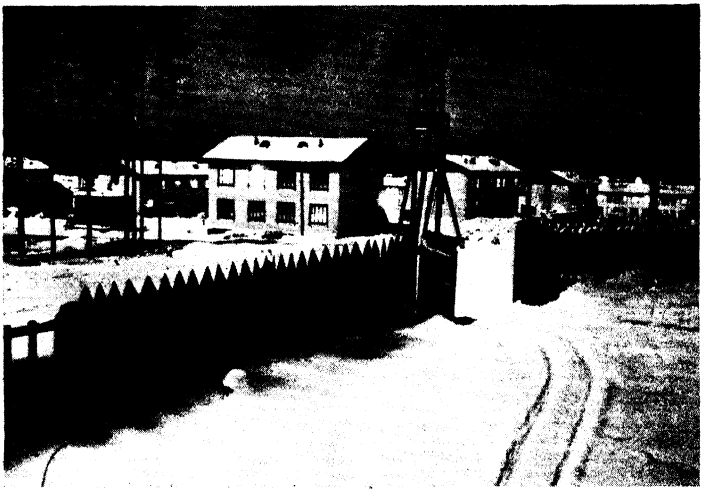
more spontaneous, never to be forgotten. Each at his task, separated from each other perhaps by yards, one pushing a car, one cobbing the asbestos by hand from the rock, another screening the material, still another busy with shovel or pick, they would sing. The songs would usually be slow, heart-gripping music filled with pathos and sadness. The Russians always chant when doing any arduous task in unison. But we never heard the *Song of the Volga Boatmen* as long as we were in Russia! No one there even seemed to know it.

Later we went to the office staff's festival. A really good variety show was put on. The white-collar workers gave a take-off on some phases of peasant life—a delightful little skit in costume, with balalaika, guitar, and accordion accompanying charming folk songs and dances. (Most Russians are born artists, especially adept at mimicry.) There would be a piano number by a splendid player, using a vilely out-of-tune, outmoded piano. Dramatic recitations were given by some members of the troupe stationed at Asbest for the season's "cultural program"—either very good actors from Moscow forced to do their "shift in the sticks" or not so good performers, apprentices who had not yet reached the "Broadway" of Moscow. Even though modern dances had been condemned as too bourgeois, there was a dance. Naturally, a buffet was much patronized. It was all quite festive, and with the exception of the interlude when some young Komsomol girl would deliver communistic propaganda, all extremely interesting.

Shortly after the October celebration our work neared completion. Answers to the lengthy question-



WORKERS' HUTS AT THE ASBESTOS MINES, AUTUMN, 1929



THE NEW WORKERS' BARRACKS, 1931



A GROUP OF MINE WORKERS COMING OFF SHIFT, ASBEST



MAIN STREET, ASBEST. The church is now the "House of Defense" and movie when not used for GPU trials or meetings

naire were far in the past. We had finished our work in the field. We had finished the detailed report on the mining systems which had been installed and which we recommended installing for each mine on the productive belt. Some idea of the immensity of this job can be gathered by the fact that there were over fifteen operating mines staggered along the serpentine zone which extended in a north-south direction for over 25 kilometers in length and two in width. We had finished our critique of the mill which was in process of erection and on the one about to be started. This critique, with recommendations and conclusions, had to do with every detail in the flow of the ore throughout the entire system of processing. Then, too, we had finished our consultation concerning the town site, the transportation system, the problem of marketing the finished product, and the like.

It was then that we really learned the difference between rubles and *valuta.* I learned how the trusts, even though self-supporting in every respect, paid its bills to other trusts in rubles, but to the trade agencies in foreign countries who purchased the import material the State Bank must pay dollars or the equivalent. This created the need for each trust to have an exportable surplus which could be bartered or sold for *valuta.* This explained why, no matter what the cost of the finished product in rubles—solely an internal family-affair matter of bookkeeping—any price in gold would be acceptable. But naturally, even as with the capitalistic system, the higher the return the better. But the gold value was the important item. It also explained why, when, and if the Five-Year Plan is successfully achieved,

this necessary urge to acquire gold at any price should have been removed or, at least, alleviated.

The translation of my reports and critiques had been completed. I had seen very little of the technical director and the president of late. I had, however, heard vague rumblings at the effects created by my work. The office was humming with rumors. The Russians seem to take a morbid sadistic delight in speculating on an approaching *skandal*, particularly if they feel their own skirts are clear.

I was told that the next days would be occupied in debating the entire subject-matter of my reports. I should say nights, not days. During the latter the staff must prosecute their routine duties. But at seven or eight every evening, during this siege, the sessions would commence. My interpreter remained with me all the time. First came the debate concerning the methods of mining. Some forty engineers—the *élite* of the technical operating personnel—would congregate in a room at the office—a room some twenty by twenty feet. Being bitterly cold outside, the double windows would be tightly closed, the huge Russian built-in stove radiating heat, first insufficiently, then overly so. Nearly everyone would be smoking. The sketches of my proposed systems would be tacked to the wall. I would begin in English to explain my recommendations. The interpreter, as before stated, a godsend in his speed, accuracy and aptitude, would translate at the end of each short paragraph, or, perhaps, each sentence. Everyone took notes. The technical director, severe and scowling, was surrounded by a small coterie, not more than two or three, who supported him. The atmosphere was

tense. The battle of policies, with men's lives perhaps the stake, had commenced.

After I had finished each phase of the report, the rebuttal or approval would be called for. Nearly every man there would arise and give his criticism. My interpreter then took notes in turn. These in Russian, pertaining to extremely technical matters with which, prior to my arrival, he had had absolutely no experience, would have to be immediately translated as he repeated them to me. Then my answers had in turn to be translated back into Russian. The absolutely imperative need for an exceptional interpreter can be easily appreciated.

I could see that the president of the Trust was approving practically every detail of my reports as they unfolded. He and the technical director appeared on the surface most friendly, calling each other by the familiar patronymics. But despite this external friendly intercourse and debate between these two men, everyone present, including myself, could feel the underlying hostility of ideas. Should the president succeed in discrediting the director, no matter whether he had formerly approved of everything the latter had done, it could only mean one thing: arrest by the GPU. Only two or three times did anything like a majority disapprove of my recommendations. And my answers to their rebuttals usually brought them too into line. The great bulk of the reports were approved and the recommendations accepted.

The same debates followed regarding the mill designs. I pointed out in detail wherein I believed the new mill, then for a second time nearing completion, would not function satisfactorily. Again that fevered antago-

nism, now becoming more and more acrid, on the part of the sorely harassed director. But he held his nerve, he stood his ground, he fought back tooth and nail, never forsaking his principles, policies, and ideas. He was stubbornness incarnate. He was an admirable fighter, that man, a fighter to the death with the courage of a lion. I felt sorry for and respected him.

The night sessions continued for probably a week. Finally we reached the end. The president seemed to be almost too elated in his poorly concealed triumph. His canny native intelligence had undoubtedly sensed something amiss when first, so many months previous to that, he had cabled Amtorg to send me out.

We awaited our passports. These, on our arrival at Asbest, had of necessity been deposited with the GPU in Sverdlovsk. Accompanying them were forms filled out by the trust in duplicate to which copies of our passport photos had to be attached. One of these forms was then securely pinned to the back cover of our American passport, becoming a part thereof. It was our permit to remain in the Soviet Union. Now, on our intended departure, an outgoing visa must be stamped on the pass to permit our crossing the borders. A certain length of time is written in ink within the seal and one must have crossed the frontier before the specified time expires. Finally, the port of exit must be predetermined and included in the outgoing visa. Only under exceptional circumstances, and with attendant red tape and considerable delay, can either the time or port of exit be changed. Several rubles are charged for this exit visa. For the entry visa in Berlin on an American

pass, the charge was 48 rubles for each person, $24 in gold.

During this wait we had little to do. An occasional consultation or incidental pieces of work. Time dragged heavily. Winter, with its climatic rigors and short days, had descended upon us with a vengeance. It was early December, and the lake now frozen over afforded a short cut to the bazaar, to the Iliyinski "movies" or to our friend at the *abteka*—the drugstore—where we bought our mineral water, soap, and the like.

We became more and more impatient as day followed day. It snowed a great deal. We could no longer even take our exercise through the woods. We had reread every book brought with us, twice, even three times. Our playing cards had been taken from us at the border. They are strictly tabu. The Russian cards from Sverdlovsk were so inferior as to make playing with them almost impossible. As they are not indexed in the corners, one never knew what cards he held in his hand without spreading them out in some way! We played chess with our pleasant acquaintance from Krupp, who already was so tired of Asbest that he had refused to remain and had decided to accompany us out of Russia.

I was asked by the president whether or not, and if so, on what basis, I would return to Russia to actively superintend the work under the Plan. I made him a proposal in writing. Nothing more was said about the matter there. Finally we were told the reason for the delay. I was asked to give my reports before the highest technical and scientific body in all Russia—the En, Tay, Ess, or National Soviet (Academy) of Technology in Leningrad, which controls every major project of a

technical nature in the Soviet Union. I was also to do likewise before the District Council of People's Economy in Sverdlovsk. As the thirty or forty members of the former must be collected at their convenience, and as the latter consisted of well over a hundred members—naturally these convocations took time.

Shortly after the first of December we were told to prepare to leave that very night. We had been packed for days and were ready. The leave-takings were tinged with an undercurrent of sadness. Musa and Mrs. Svedberg accompanied us to the train. Tears filled their eyes. Everyone was quiet or forcedly gay. What would happen to this family after our departure? Would we ever see them again?

The president and the technical director were going with us. Finally, we were accompanied by our new and much-liked German friend. The train was to depart for Bajenova at four in the afternoon. It was already dark and bitterly cold. We could hear the little locomotive shrilling as it worked back and forth, fueling, watering, and making up the train. A new gasoline-electric locomotive of latest design had been purchased from Austria, along with three silly, little wooden cars, for all the world like our old horse cars in New York. These, for some reason, probably because they were constructed of light wood not available in Russia, had also been imported. They had no vestibules, were egg-shell in thickness, single window-paned. The doors and windows stuck and rattled, and the cars were entirely devoid of any heating device, this despite the fact they were to be used in the Urals at fifty below zero! But the "new train" was not running that evening. No suffi-

cient gasoline supply had been laid in, and they were having trouble finding an operator sufficiently skilled to master the intricacies of the gas-electric system.

Finally, our train pulled in. The director in a heavily furred coat, the priceless possession of pre-revolutionary days; the president in his caracul Russian hat, shaped like our officers' field caps during the War; the German engineer shivering in a usual cloth overcoat, my wife fairly comfortable in her "woolies" and beaver coat; and I in a fur-lined coat belonging to our poor friend, Svedberg, were ready to start. My coat was much too short for me in all respects, but Mrs. Svedberg had insisted, and I was to return it from Moscow before our ultimate departure from Russian soil.

In due course we arrived at Bajenova. The president disappeared. At the hotel my wife, the director, the German, and I were given the "inner sanctum." We consumed the cold supper the Svedbergs had put up for us and drank glass after glass of tea and then prepared for the night by merely divesting ourselves of our shoes and outer garments. We blew out the kerosene lamp. My wife slept opposite me, the director occupied the cot next to the German. We tried to sleep.

I shall never forget that night as long as I live. About one or two in the morning we were awakened by the most ghastly sounds imaginable—sounds that rasped the nerves to a state of rawness. They terrified us. The director was tossing, turning, and moaning, beset by fears that none but his subconscious mind could know. He was grinding his teeth so that we nearly went mad. I could not sleep another wink that night. I lay there in my cot and smoked one *paperosi* after another. I thought

and thought until I too felt I would go out of my mind. The grinding of teeth and moaning continued. Gone was the nerve of steel, the brave outward bearing. Only stark, primitive fear was left.

We took "the Stinker" (as my wife and I had by now dubbed the train from Bajenova to Sverdlovsk) in the cold darkness of six-thirty in the morning. We just had time for a glass of tea, which at least served to start our blood circulating.

For three days, with night sessions going until one and two in the morning, I addressed the assembly of the supreme administrative body of the Ural District. Professors, scientists, engineers, economists, Communists, and executives, political and economic, and even the GPU were present. The debate was similar to that at Asbest. First I would give my reports and recommendations. Then would follow the technical director of the Trust. Then rebuttal and counter-rebuttal.

A German doctor of geology, Herr Professor Ohnesorge, had also been asked to attend. He was youngish, very likable, and an excellent technician. He knew and spoke Russian quite fluently. He was also asked to comment upon my proposals. When his short remarks had been translated to me, I was asked to answer him. Wishing to avoid additional controversy, which surely already had gone far afield, I could only think of one thing to say. The worthy and esteemed professor's name, Ohnesorge, literally means in German, "without sorrow" or "without trouble." My sense of humor got the better of me. My answer was short and non-technical. I said in German, "*Ich hoffe sehr, die methoden des Herrn Professor Doktor Ohnesorge auch*

ohne Sorge sein würden" (I sincerely hope that Professor Ohnesorge's methods will also be without worry).

It was a pretty poor pun, I admit, but it clicked with the Russian sense of humor. My point was carried amid much laughter. So occasionally must one do when he is working in Russia. The understanding professor took the incident with perfect good humor. He joined in the laughter and evidently had not in the least resented my possibly poor taste. Upon my return to Russia we were to become fast friends; he was my guest at the mines and even asked me, when in Germany, to stop off at Freiburg to lecture at the Mining Institute.

During our last day there we went over to the leather trust and received the Russian boots of soft calf, which had been made to order for us. We received the "wholesale" price; in Russia it is rather the *valuta* price —only twenty rubles for each pair. They have been a constant source of pleasure to us and of envy to our friends. Although they fit snugly and "stay put," the leather is so soft they can be rolled up like a glove. We also were able to purchase some exquisite ivories carved from prehistoric mammoth tusk by the Siberian natives —museum pieces of great artistic value.

I was invited to a last meeting with the president of the council. He kept me for more than an hour telling of the plans for the industrial development of the district. Here a cement mill with an output of so many million barrels a year; here a gigantic steel mill; here a huge copper development, and so on. I was invited to return to Russia. The District Council would approve a new contract in Moscow. And would I recommend to them some hundred or hundred and twenty-five American

engineers for the work in the Urals? I promised that I would consult with Amtorg about the matter.

We finally learned that we had been booked on the west-bound Trans-Siberian Express. Early in the evening my wife, the German, and I took our departure. The director was to follow us to Moscow by a "fast train." We took leave of our wonderfully competent interpreter. Leaving our luggage in our compartments, we could not wait getting into the dining car. We were to have a change of food at last. My wife's joy and relief at finally starting our return trip home, after nearly three weeks of daily postponement, knew no bounds. I too was elated, and the German acted as though the War had just ended. The smells and lack of cleanliness throughout Russia offended his neat orderly Teutonic soul.

Homeward bound! Beyond Sverdlovsk the Express gathered speed. We ordered a huge dinner, vodka first, wine with our meal, cognac afterward. We were like kids out of school. In the car was a Dutchman returning from Japan, where he sold tulip bulbs. He had a portable victrola and all the latest Japanese discs recorded from American matrices. With him throughout the ten-day journey from Vladivostok was a Cossack general. The latter had been out to visit his dying brother who had had a leg shot off by an allegedly Chinese dum-dum. He was in typical Cossack dress, his round head shaven bare though he could not have been more than thirty. There were also two dignified well-dressed officers of a large trust, who were bound for America.

The Dutchman and one of the Russian executives knew English fluently. We all joined up and the party started. Hours later, the phonograph still going, the

drinks still coming fast and furiously, my wife retired, only to reappear in a red Russian blouse she had bought me and her newly acquired boots—a fur cap on her head. With roars of acclaim from all, especially from the dignified Soviet executives, she did a fast Ukrainian dance. Each in turn, in typical Russian fashion, joined in the dance. The party was a great success. Ten hours after we had first started dinner we left the dining car for our respective compartments. The second morning following we were in Moscow, again to be met by our former friend, the little interpreter who knew only German. I was by now nearly a match for him in that language.

We had a most comfortable suite at the Grand Hotel, or *Bolshoie Moskovsky*, as it is known by the people in Moscow. I was taken immediately to meet the president of our Trust at the office of the head of the Supreme Council of National Economy. We started to work at once on the new contract, my third with the Soviets. I was adamant. The text was to await our return from Leningrad, and the final, formal contract was to be drawn up and signed at Amtorg later in New York.

The night I was asked to give a lecture contrasting Canadian and Russian asbestos deposits before the Geological and Mining Institute of Moscow, my wife joined two Americans who were the first tourists we had encountered in Russia. They attended a program given by an entirely unconducted symphony orchestra of over a hundred pieces and returned bubbling over with enthusiasm. Later, the four of us dined and danced at the hotel, the only oasis for the foreigner in Moscow. Dining and dancing at the Grand is, for the most part, patron-

ized by visiting Russians, Moscow officials, high executives, and officers of the GPU. When the music stopped at three A.M. (it begins at midnight), we sought out what must have previously been the private dining room reserved for royalty. It was still a beautiful room, the table linens and silverware rich and becrested. This room boasted a fine piano. One of our American acquaintances, a young college man, knew all the latest popular music from home. He played marvelously well. We were in raptures until the *maître d'hôtel* cut short our private dissipation curtly, dourly, and none too politely. Being in that room was *verboten.*

One morning we joined a party being guided through the Kremlin. This is something no visitor in Moscow should miss. It alone makes the trip to Russia more than worth the effort. I used to think of the Kremlin as merely a castle. It is, in fact, a veritable city. It has its own streets, many palaces, a number of exquisite churches, one in which the Czars were baptized, another in which they were married, a third in which the coronation ceremony was sanctified, and so on. The Czar's former main palace is now a museum. Here one sees the silver- and gold-ware of the Romanovs (the crown jewels are to be seen at the vaults of the State Bank), their armor and arms collection, and all their personal effects, costumes, gowns, and bejeweled saddles, even the sleighs and carriages, of Catherine the Great. Particularly interesting are the huge boots of Peter the Great, made by himself.

In Sverdlovsk we had gone once or twice to the opera, where we had heard *The Barber of Seville* well sung and admirably acted. Russian opera singers can

act as well as sing. The orchestration had also been all that could be desired, and the presentation compared favorably with our own Metropolitan. There again was an example of the cultural program out in the provinces, to which the finest artists and foremost stars of Moscow and Leningrad are induced every season for the uplift of the masses throughout Russia. In Moscow we heard *Aïda,* and at the Malinki Opera, the light-opera house, our now long-departed *Rose-Marie*—a great favorite in Soviet Russia. It is in every operetta repertoire, as much a fixture as the classical grand operas. Most interesting of all was the fantastic opera at the Bolshoi Teatr'—*The Love of the Three Oranges.* This was magnificently staged, sung, orchestrated, and danced, the effects and technical production incomparable. We also heard a great deal of the tremendous success an American colored revue had made in Moscow during our absence.

We entrained for Leningrad and remained there four or five days repeating before the National Academy what we had already done before at the mines and at Sverdlovsk. This body is composed of the most renowned engineers, professors, scientists, and technicians of all Russia. The great majority were well past middle age, and thus had been trained at the then imperial universities, institutes, and academies. Many knew several languages; many had done work abroad; several had been employed in America before the Revolution for American firms; several had degrees from American universities. Here was a group of well-dressed, cultured, refined men of the highest mental calibre and technical achievement. Their courtesy toward me, an American and a man younger than most of them, was

perfect, their friendly and utterly tolerant attitude most cordial. The director and president of Uralasbest were present.

The "sittings" would commence at nine-thirty or ten in the morning. Tea and buns would be passed at twelve-thirty or one. The sessions would break up at four or five to permit one to go home. At eight discussions would be resumed, to continue until possibly one in the morning. This continued for three or four days. The Academy members would all be seated around one huge table. The plans and maps were already affixed to the wall-board. A sweet, elderly little lady of French birth who had been married to a Russian was the interpreter. She spoke a fine conversational English. But the poor soul was naturally out of her depth when it came to translating the technicalities of asbestos extraction. I positively yearned for my expert translator at Sverdlovsk! Finally one of the Academy, a gentleman who had worked for years in America, whose daughter had even been born over here, graciously took on the onerous task and responsibility of interpreting my reports and the debate.

Now every detail of the technical director's plans, as well as my own, was placed under the most careful scientific scrutiny. The director fighting with his back to a wall was making his last stand. I could not help but wonder whether or not this same group of men had passed upon those very plans which now were so heavily under fire. The procedure was somewhat different from the previous seances. I would first be asked to criticize the proposals and projects of the director, then to expound my recommendations and plans. The director was next called upon to defend his own ideas and to rebut

mine. Then the Academicians would comment and finally would come the counter-rebuttal of the two major protagonists.

Throughout these long, tedious sessions, the president of the Trust would throw any weight of evidence against the director. For example, when I maintained that it would be difficult, if not impossible, to get men to work on the 45° slopes of the "glory holes" under the rigors of the Ural winters—and if they could be made to work at all, their productivity would be practically nil, due to the danger involved—the director denied my statements vigorously. A theoretical scientific discussion ensued. Finally out of patience, the president jumped up and said, "Gentlemen there is no need to enter into theoretical speculation as whether men can or cannot work under the conditions just mentioned. To bear out Mr. Rukeyser's contentions, only two weeks ago a committee of workers visited my office and told me they would refuse to work in the "glory holes" under present winter conditions." And so with every moot point.

When I criticized certain features of the proposed mill, which was to be almost a duplicate of the one then building, criticized them not only in respect to their unsuitability for asbestos work but even on the grounds of being archaic in modern mill practise, even bad mechanically, those of the Academy who had recently been to America would bear me out. I could feel the silent approval of the majority of those present, could equally feel the director giving ground, becoming less and less certain of his footing. He was breaking under the strain of trying to maintain a most vulnerable posi-

tion. I thought back to my first interview with him less than four months before. I remembered his poorly concealed antagonism. I wondered if this was indeed the end of the struggle at last.

When the questions ended and a formal ballot had been taken, I was told that "over 95 per cent of my recommendations on both mining and milling had been approved by the Academy." I felt no exultation, no sense of personal triumph. I felt as though I had killed a man.

Walking to a tram from the Institute that night in company with the president, the director, and a small group of Academicians, I dropped back to have a few words in private with the director who, head on chest, his huge fur collar entirely hiding his features, stalked behind. "Ivan Philipovitch," I said, "I only want to tell you that this battle of methods and policies has for my part been entirely impersonal. I respect and admire you as a capable engineer, a worthy adversary. If our ideas differ—at least it is an honest difference of opinion based on different experience. In America, men may be the greatest of business enemies during office hours, and outside remain the best of personal friends, without malice, without rancor. Cannot we do likewise?"

He extended me his hand. A tear glistened in his eye. "Mr. Rukeyser," he answered slowly, "I do not believe you realize what all this means to me. I do not refer to the personal danger of arrest. That would probably come anyway, in any event. Either one is trusted or one is not trusted. If he is trusted, he can do no wrong—his honest mistakes will not be held against him. If, due either to his antecedents or whatnot, he is

not trusted, then it is merely a question of time. No, it is not that. Rather, it is the pain of seeing one's life's work being swept out from under him. I have had large positions of responsibility all my life. I am no longer a young man. To see this, probably my last really big effort, go awry—that and that alone is the crushing blow. I am convinced of your sincerity. I am equally convinced that to you this has been an entirely impersonal matter, just another series of engineering problems. If it had not been you, it would have been somebody else. If it had not been somebody else, and if the technical results you believe will happen do happen, the ultimate would be the same. Possibly postponed for a few months, nothing more. Should you return to Russia and I am still the director, I shall be pleased to work and co-operate with you. You had to do what you did in the interests of your clients. Good night."

I never saw him again. Upon our return to Russia the following spring, he was not at the mines. The GPU had again reached out its hand. I was told that he was imprisoned in Sverdlovsk, probably later to be sent to some less attractive post out in the northeastern Siberia, for which no volunteers could be found. It was even said that he had admitted to sabotage, to being a member of a counter-revolutionary organization. Thus the drama ended. And a cynical fate was to assign us, upon our return, this same man's own quarters. We were to suffer vicariously with him as we entered what had been his house to find his personal knickknacks still strewn around as he had left them when the hand of the GPU had fallen. That, too, is working for the Soviets.

Before leaving Leningrad I was asked to go through

the works of the *Krassni Teugolnik* of the Rezinotrest—the Red Triangle factory of the Rubber Trust. Here was located an asbestos spinning plant, modern in every detail, making asbestos brake lining, yarns, packings, and so forth. Twenty-two thousand hands in all were employed. Two American experts—practical factory men—had just arrived to supervise the operations. We saw the recreation rooms, the cafeterias, and all the features for the benefit of the hands, most of whom were girls. There were bottles of milk beside each worker, from which they were forced to drink periodically as an antidote against possible reagent poisoning. The ten-minute rest periods at the end of each fifty minute of work was also an interesting economic feature to me.

But the most astounding feature of industrial life under the Soviets was the fanatical pride of all workers from the head director down to the lowliest "mop." The system had indeed made it "their" plant. Along with this pride was an unflagging, ever-present interest in all things American. "And have you better or bigger plants than this in America?" would greet me on every side. To the Russian worker—even to most of the "higher-ups" with whom one came into casual contact—the American appears as a superman, a demigod, who, completely apolitic, has come to Russia to help the proletariat become industrialized. I have never seen such racial hero-worship anywhere. But after all, that was at a time when Americans had not become a too familiar feature. Who knows, perhaps familiarity *does* breed contempt?

On our return to Moscow we learned there had been a panic in Wall Street. We met a doctor from Bos-

ton who had been wiped out in the crash. He had come to Russia to regain his shattered nerve force, and perhaps to look over the ground under a socialistic system where stock markets no longer had any significance. It was then nearing the end of December—the crash had come three months before—yet only then did we hear of it. The last two days of our first trip to Russia were spent negotiating the new contract with the Supreme Council of National Economy. At all these interviews with the *praesidium* and their legal staff, well-versed in English law, the president of Uralasbest was present. He it was, if negotiations were at the breaking point, who wheedled this or that concession, first from the Council, then from me. Finally, most of the major points were decided. With figures left blank, I signed the rough draft. The final contract was to be formalized at Amtorg. The draft would be in New York before us, I was assured. I was to return to Russia in March. I had made a new, a third contract with Soviets, for better or for worse.

On the eve of my wife's birthday we took our departure from Russia. I had given my fountain pen, pencil, an extra hat, my woolen underwear, my razor even, to Russian friends who we had made during the trip. The borrowed coat had been returned to the Svedbergs. So, bewhiskered but coatless, yet joyful in our hearts, we entrained that sharp, cold night in December, 1929, to bid *dosvidania* to the Great Enigma—the Great Experiment and the Five-Year Plan.

We celebrated my wife's birthday the next night in Warsaw. We were in a different world. We had American cocktails. We ate ourselves out of shape. We

ordered everything we had dreamed about for weeks, nay months. Lobsters, oysters, big thick, juicy steaks, green vegetables, salads, and a Scotch and soda. We felt ourselves truly at last homeward bound.

CHAPTER FIFTEEN

JUNE, 1930: A COMPARISON

NOT ONLY did Amtorg not know anything about the proposed new contract upon our return to New York, but for nearly two months afterward they had not one single word from Moscow about it. So, although the negotiations in Moscow had taken place in December and we had returned to New York before the middle of January, it was April before the papers actually were signed. A further delay ensued until ratification by the Supreme Council should be received from Moscow. I had by this time practically given up any idea of returning and was occupied in making other engagements when official notice was given me everything was in order and I was to proceed back to Russia without further delay. That was in early June, six months after I had been invited to return "in March."

The representatives of the Trust in Berlin advised me upon our arrival there that the president was expected momentarily and I was to await his arrival. He

was bound for America. Our meeting there was the last until his return to Asbest the next December.

Shortly afterwards we were once again in Moscow. June is probably the most delightful month of the entire year in northern Russia. It is the month of the "twilight" nights and the one short interval in which the sun seems to shine a fair average number of days. Late summer and early fall is a time which seemed to me to forebode continual rain. Winter, in Moscow at least, means sleet, snow and overcast skies; in Leningrad, fog, damp cold, and wet snow.

Our trip had been pleasant and without incident. This time we were met at the train by a chap who had been in the office at Asbest when we were out there. He had been transferred to Moscow upon the occasion of the "centralization of industry." During our absence large super-trusts had been formed, taking in as subsidiaries smaller units engaged in allied lines. Thus, as previously explained under the chapter dealing with the Soviet state trust, Uralasbest had become a part of Mineralrud. This super-trust supervised not only asbestos production, but also all the so-called non-metallic mineral industries such as talc, magnesite, chromite, emeralds, marble, building stones, and the like. The president of Uralasbest was still in complete charge of the asbestos unit, but general policies were dictated from the office of Mineralrud in Moscow. This condition has recently once more been changed throughout Russia. Today, again, industry has been *de*centralized. The super-trusts were found too unwieldy for efficient administration. The red tape, bad enough, heaven knows, before, had become well-nigh impossible. Friction be-

tween offices had resulted, accompanied by a great deal of lost motion, shirking of responsibility, and "passing the buck." So now, at the present writing, the decentralization process is under way. Such is the flexibility of the dictatorship.

We had heard during our trip back home that the collective movement was being pushed to the straining point. The collectivization tempo had been too greatly accelerated. The peasants had set up a passive resistance, as only slow-thinking, stolid, canny peasants can. If, let us say, a mujik had five cows and he was supposed to collectivize four of them, rather than do so he killed the four, salting away the meat, tanning the hides, and selling the hoofs and horns for making glue. Integrated, this meant that throughout the entire length and breadth of the country nearly half of all the live stock in Russia had been slaughtered. Stalin, the realist, had, just prior to our return, issued an order relaxing the tempo of collectivizing the peasant. The evil results of this accelerated tempo had precipitated the split in the Party. The battle between the orthodox Left and the heretical Right, the latter headed by Rykov, was in full swing upon our arrival. The meeting of the Congress was then in session, depriving us of the pleasure of hearing more opera and seeing the ballet at the Bolshoi Teatr'. Also, this had resulted in the hotels being overcrowded and transportation exceedingly hard to obtain.

Despite the fact that the highest potentates from every corner of Russia had assembled in Moscow, it soon became evident that the Kremlin had not made, or perhaps had not been able to make, any "dressing up" of the show window of that "front." The change in

conditions, as we had left them the previous December and as we now found them, hit us in the face. It was astounding.

We were taken first to a miserable hotel across the river, which was at the time being renovated. The dirty room, several flights up, assigned to us beggared belief. Cockroaches, the size of which I had never seen even in the tropics, overran the place. The nearest restaurant was a mile away. But my Trust was up against a stiff proposition. The Savoy had been turned over to the British embassy during the rebuilding of their permanent quarters. (Diplomatic relations with Great Britain had been resumed after a hiatus of several years.) The Grand, Metropole, and Europa were filled to overcrowding with delegates to the Congress. To make matters worse, the quarters which were to be built or were under construction for the foreign specialists on long-term contracts had not been completed. This also depleted the number of rooms available for transients. To cap the climax, the Grand which for such a long time past had been half disrupted, due to a complete renovation, was still unfinished and some several thousand tourists, mainly from the United States, had been solicited to bring over their welcome *valuta*. The result was hectic.

Ultimately, late that night, our Trust succeeded in getting us a comfortable room at the Grand. The changes which had taken place during those six months became apparent at once. First of all, the little corner cigarette kiosks had all been closed or were now selling newspapers. Even at the hotel one could only purchase the poorest grade such as "Mak," which formerly cost not

over 18 kopeks. Brands such as this were now selling for a ruble and a half a pack. The Trust again came to our help. They gave me an ample supply of better-grade cigarettes (now being exported to bring in every available dollar of *valuta*), and the charge to me was the gold price. In the restaurant at the Grand, practically the only available eating place for the foreigner, technician, and tourist alike, the shortage of foodstuffs was to us almost unbelievable. Coffee, if at all, always without milk—usually chicory and cereal, not *mokko*. Sugar not at all. Butter, white bread, cocoa, poultry, sweets, fresh fruits or vegetables—not at all. Possibly there would be one meat selection on the menu. Only wines and cognac of most inferior brands and at highly inflated prices. Two rubles for a stein of weak, nearly tasteless beer. I heartily wished for our "prohibited" beer back home at a quarter the glass.

On the streets all the shops seemed to have disappeared. Gone was the open market. Gone were the nepmen. The government stores had showy, empty boxes and other window-dressing. But the interior was devoid of goods. One could buy all sorts of sporting goods, single-shot rifles, children's games, and such stuff, but an occasional pair of shoes selling over here for not over $2.99, would be priced at thirty rubles; shoddy suits for men, poorly made, at 200 to 300 rubles each; and everything else in proportion. Imagine paying $100 to $150 for a suit of clothes for which any second-hand dealer on Seventh Avenue would be ashamed to ask $10. Phonograph records had simmered down entirely to the operas. Jazz records were entirely tabu. Even the fast-moving Ukrainian dances could no longer be

had. But one could buy parts, tubes, aerials, condensers —everything for a radio. The propaganda program must not stop. And after all, Russia could hardly sell on the world markets their production of these commodities. Even at that time power speakers and electric sets were still unheard-of in Russia.

Where formerly we had had two rooms and bath for both of us at eleven rubles per day, we now paid double that for one room without bath. But above all was the astounding fact that there was no "small change" anywhere in the city. This condition existed everywhere we went—Leningrad, Sverdlovsk, the mines. One would board a tram or a bus, tender a ruble note, only to find one had to pay the entire ruble for the ten-kopek ride; take ten tickets, for which he probably had no earthly use; or get put off! The same in the kinos, when buying a paper or a bottle of Narzan. The answer was simply, with the inflation, a systematic hoarding of "silver" and coppers had resulted. *Protokols* were posted threatening dire punishment to anyone doing so. But to no avail. A peasant, so we were told, one of the great untouchables, was shot as a Kulak for having "hoarded" thirty rubles in small change! It was obvious that this slow-thinking, stolid, canny peasant was beginning to lose faith not only in the admittedly paper ruble but also in the supposedly gold-backed *chervonitzi*—treasury notes of ten-ruble denominations. This was keenly emphasized in our experience, when later, at what was left of the bazaar at Asbest, we could purchase a cucumber or pickle for a ten-kopek piece if we had one, whereas if not, it would cost a ruble note. Even though

the peasant had the change to give us, he would stolidly refuse to part with any of it.

After a couple of days in Moscow meeting the heads of the Mineralrud, and during which we had the opportunity of hearing the Pushkin-Rimsky-Korsakov opera, *A Night In May*, at the Malinki Opera, we were asked to leave immediately for Leningrad. It seems, that despite all that had happened during our first trip, despite the report of the National Academy and the approbation of everyone concerned, Uralasbest had ordered from the State Designing Trust—Mekanobra Proyekt—a complete set of detailed working drawings for the new mill Number Three. And equally despite the fact that my return was so imminent and that was just the sort of work for which I had been engaged. Nor had my recommendations been adopted.

Here is a phase of Soviet "economy" I cannot for the life of me understand! They pay a foreign specialist the dollar-*valuta* sweated out of the people through sacrifice, only to either disregard his recommendations or circumvent him. I will admit this condition does not apply to all trusts. However, I have just recently read Walter Duranty's dispatch to the *New York Times*, in which he tells of John Calder, one of the best American engineers working in the Soviet Union, after three months of frustration or complete idleness, going direct to Moscow and raising merry hell. And he had been honored as no other foreign engineer before him. He was made equal in responsibility to the Communist president of his trust, one of the largest under the Five-Year Plan. Equally so did the Baltimore and Ohio operating man, brought over with a large staff of Americans to

try to put the transport system on its feet, finally threaten to leave Russia unless they gave him and his men something to do! It is incomprehensible.

But despite this state of affairs, order seems finally to filter out of the blunders and chaos. Russia seems to me to work on the theory, "Get all the projects together by as many minds as possible. Then take the best features of each." But who is to say what are the best features? Slowly they are centralizing responsibility in the hands of the experts hired for just that purpose. Slowly they are realizing it is far better to get the best man available, give him free rein, and grant that he is honest and that any mistakes he makes will be honest ones. Slowly they are coming to the realization that such mistakes are usually easily ironed out; that American design is, above all, flexible. If this policy had been adopted from the very beginning, how many Russian engineers of bourgeois origin would still be alive to give their work to the Soviet cause!

In leaving Moscow for Leningrad, we had another one of our experiences with the question of transportation. Taxis were no longer the problem they had been in the previous year. Comparatively speaking, the streets "swarmed" with Fords. Each trust usually had its quota. Even the state taxis were now out of Dearborn. Now and then the higher officials could be seen dashing about at a furious and seemingly reckless pace in shiny new Packards, Cadillacs, Buicks and, very occasionally, a Rolls! I wondered about Communism. But I refer to our sleepers on the train. Thinking that after what had happened upon our initial trip there would not be a recurrence, we all unsuspectingly accepted the tickets, and

now knowing our way about without our interpreter, departed for the station. We allowed ourselves a good hour before train time. But it was after midnight, some three hours late, that the train finally started. There had been a wreck along the line just outside of Moscow.

In that reeking buffet where we could at least sit down, even though the tables were littered with refuse, and drink a glass of weak, unsweetened tea, we met one of our acquaintances made the previous December in Leningrad. He explained to us the critical breakdown which had taken place in the transportation system. Roadbeds and rolling stock alike were cracking under the strain of the exigencies of the export program, the lack of maintenance, the *nichevo* attitude of the men, the dearth of skilled mechanics, and the strain of a hard winter and late spring. Wrecks were appallingly common. Carloadings were below plan. Trains were lost by dispatchers. Sidings were jammed with commodities, some of which were of a perishable nature. In the days and months to follow we were to see vivid examples of all this. Here an entire freight train turned over an embankment. There, two passenger trains telescoped. Siding after siding all along the road to the Baltic jammed with cars of pulp-wood and lumber. Lack of sea-going bottoms and dock-handling facilities. No wonder the rolling stock was tied up! To add to the condition the coal production program was lagging and, in a vicious circle, cars were not available to move the coal from the pit-heads. Result, the Trans-Siberian Express burning wood at 58° below zero, two and one half days late. This was the train I took out last January.

I didn't know whether it was Wednesday's or Saturday's I was taking, nor did anyone else.

The telegraph situation was just the same. The wire sent to Leningrad arrived after us. The one we sent back to our Moscow office never was received. The one sent me by Knickerbocker to Asbest from Moscow asking me to meet him arrived the same day he did. And so on. Yet the cables from abroad and the foreign mail came through faster than ever. I received a letter out at the mines posted in New York twelve days before, where one from Moscow might easily take as long. A pound of coffee would be sent me by my New York office every week. Four weeks I would receive none, then five would come together. I could enumerate experience after experience similar to these.

But the point I started to make was that upon this train to Leningrad we found ourselves in a Russian car four persons to the compartment! There was another gentleman and another lady, each a stranger to each other and to us. The custom seems to be for the men to wait in the corridor until the ladies are abed, whereupon the latter discreetly turn their heads to the wall and permit the gentlemen to disrobe. It is all quite naïve and far more pleasant to look back upon than to experience.

At the Europeskaia in Leningrad we found no room reserved for us. An entire boatload of American tourists had just landed. The Five-Year Plan became of secondary importance. I was assured that we would have a room "at any minute." With this assurance my wife decided to hold down the fort until she could get a bath

and some much-needed rest, as sleeping four in the compartment had not been exactly conducive to sleep. The strange gentleman, even though he was indeed a gentleman, had rent the night with the Soviet national anthem. We couldn't even get breakfast, since this meal is only served in the rooms.

I went out to the Design Bureau in a tram. No taxi, not even a droshky, could be found. The latter were getting fewer and fewer, due to the prohibitive price of feed for the horses. The personnel at the offices there greeted me as an old friend. It was quite cheery. I learned more of the project which the *praesidium* of Uralasbest had ordered. My bewilderment only increased. Out there in the Urals was a plant embodying many, if not most, of the features of this new project. It was already complete and one unit ready to run. Yet they were designing this new mill without embodying what the National Academy had approved the previous year and without running any tests on the plant already completed. The lack of logic was beyond me. That very first day I convinced them that the work must be started again from the ground up. Everyone was most perturbed. Each had visions, I suppose, of what would happen had I demanded a new design.

It was eleven o'clock that night before we were assigned rooms at the hotel. I fumed, politely yet indignantly. I presented my credentials. I finally suggested that since I was on the Trust's business, there would be no other recourse but for me to go to the Peasants' and Workers' Inspection. We were assigned a suite! At twenty rubles a day. Once upon a time the large living room which boasted gilded furniture, crystal chan-

deliers, a fifteen-foot ceiling, and a grand piano must have witnessed some marvelous parties. Today it was simply dowdy. Tarnished gilt. Depressing. But we were more than satisfied and quite comfortable. Dinner, a *table d'hôte* costing only of a couple of rubles or so and really good, was attractively served on the roof. We suddenly remembered the American tourists.

The next evening we tried to dine at the usual Russian hour instead of at seven o'clock. The rooms were filled with quite nice-looking Russians. Leningrad seemed to retain more of its old air than Moscow. The people were better dressed and acted gayer. The city was cleaner, though comparatively deserted. Since Moscow has been made the capital, the influx into that city has been prodigious. It is fearfully overcrowded. The population in 1929 was said to be nearly 2,000,000. Today, I understand, with its environs, it is nearly 4,000,000. Construction *could* not keep pace. The overcrowding of quarters, offices, streets, everything, is most noticeable. It also accounts for the shortage of commodities. Without refrigeration or suitable storage, perishables go bad. Then, too, the distribution system could not be expanded rapidly enough to take care of the overnight increase in the population. Leningrad, on the other hand, since losing the seat, not only of the government but also of the economic units of production —the Trusts' offices—had lost several hundred thousand of its population. It had become an academic center. Here were the best universities, institutes, and scientific laboratories, here the bulk of the Soviet intelligentsia. Here the National Academies and such.

The second day it was fully decided to follow my suggestions. I insisted that they send two of their engineers out to Asbest, both of whom were as quick, sure, intelligent, practical and hard workers as any Americans. One spoke a good technical English. They, with the engineers under my supervision at the mines, would run scientific tests at the new mill, take the projects and recommendations already made, and, with the best features now readily determinable, go ahead and design the new plant right on the ground. It seemed logical and was agreed upon. My work in Leningrad was therefore finished. Time was the essence. We must dash back to Moscow and get out to the mines as soon as possible.

With the pride of which only the Russian scientist or technician is capable, they showed me their testing and other facilities at Mechanobra. Their layout would make The Department of Mines, Bureau of Standards, and Geological Survey at Washington sit up and take notice—acres of beautifully built and completely equipped laboratories. Here the spectroscopic analysis, here the electro-chemical, the mineralogical, the ore-testing, and so on. The finest equipment procurable, every possible facility. They showed me some work going on, the solution of a problem which has baffled the hydrometallurgists over here. At pure science, research, experimental work, there is no one better than the Russian. At anything which one person can do by himself or create alone no one can beat him. Their biological chemistry, medicine, and surgery rival the Germans'. We had a woman surgeon out at the mines who took a splinter of steel out of a man's heart with complete success. So with the hundreds of young men and women, equally

divided, working far into the night on some abstruse or practical scientific problem which was his very own. In such individualistic work the Russian cannot "pass the buck," cannot sit back, smoke and sing and let the other fellow do it. No *nichevo* when his is the entire responsibility.

That afternoon, on the way to the hotel, I had no change to give the woman tram conductor. A not bad-looking chap sitting opposite, with the ever-present curiosity toward everything American, insisted upon giving me one of his tickets. He then came and sat next to me. By the time we had crossed the Neva and were going up what was formerly the Nevsky Prospekt, the car had become jammed. Arriving at the Europoskaia, I alighted and reached for a cigarette and my Dunhill. The lighter was gone. It was onyx and gold, an anniversary present from my wife. The Intourist Bureau at the hotel gave us an interpreter, a charming girl dressed quite up to the minute in summery chiffons, who thus looked quite un-Soviet. The three of us went to the criminal police. We made out voluminous reports. "Yes, we know nearly every criminal, whether pickpocket or worse, in Leningrad. We know their habits, where they work, their beats and fences. Only a short time ago the German ambassador's gold cigarette case was stolen and we had it back that same day for him. We'll recover your property."

They took our names, the trust for which I worked, our hotel, our Moscow, Asbest, and New York addresses, but we never heard any more about it. It is my opinion that whoever took the thing did not do so with the intent

to melt it down, but to use it for the purpose intended. My insurance company cancelled its policy after that second episode. The wear and tear in Russia is rather high.

Although there now was not one blessed thing for me to do in a professional capacity in Leningrad, Intourist could not get us train accommodations for four days. Again the Five-Year Plan must wait. Despite the fact that the trains were already overloaded with persons travelling on Soviet business, despite the fact that hotel accommodations were also woefully lacking and food critically short, several thousand tourists were being dumped continually into the country by their foreign booking offices. That is how acutely *valuta* was needed.

With four days to kill, we proceeded to sight-see Leningrad, the opportunity for which we had not had on our previous trip in December. It must have been a glorious city in its heyday. Now it was none too clean, the streets in bad disrepair, the buildings crumbling off their stucco, and sorely in need of paint. A seedy atmosphere permeated everything. The entire city represented a truly cosmopolitan aristocrat of the old school who, fallen on evil days, tries to hide from the world the cardboard patches in the soles of his shoes, the shine of his trousers, and the frayed edges of his linens.

Commodities here were also extremely scarce. A flower vendor swapped me a posy for a cigarette—my first experience at barter in Soviet Russia. Cigarettes were only rationed out by the trusts. The engineers of Mechanobra were allowed at that time two packs—50 pieces—a week. This was cut down later in the summer

as the commodity situation became more and more acute. At the hotel one saw the reason for this shortage and why everyone outside of the technical classes was smoking the vile mahorka rolled in a cornucopia of newspaper. For a certain hour or so each day a little booth adjoining the Intourist Bureau would be opened for the sale of cigarettes. One had to show his receipt proving he had exchanged dollars for rubles. Then he could buy, in unlimited quantities, the very finest Russian cigarettes elaborately packed in artistic boxes. After lifting up the foil, one would see printed in English a little notice to the effect that "these cigarettes are made of the choicest blend of Crimean and Russian tobaccos and of the finest paper (French) procurable." It was true. They were for export. I saw one poor Russian, undoubtedly a high executive of a trust visiting Leningrad on business, who could not beg, borrow, or steal even one package. He had no *valuta* receipt to show. In Russia a law is a law, and respected as such. Off to one side I gave him a package of mine. You should have seen the expression on his face, before and after. I wonder at the feeling of those Russians, even the Communist heads of trusts, when away on business they see the foreigners getting the best foods, cigarettes, and wines, the mass of the Russian people, little or nothing.

In Moscow the *valuta* system did not prevail. There were no gold prices, even at the hotels, for the foreigners. But if one were resident there, he would get his proper "book" upon presentation of his *valuta* receipt and buy his requirements from a special store reserved

only for the foreign specialists, diplomats, and correspondents. But I noticed that the heads of the trusts could usually offer me as good a cigarette as I them.

We went out to Dietskoie Selo, the Children's Village, formerly Tzarskoie Selo. Here one sees never-to-be-forgotten sights, chief among them the palace of Catherine the Great, each room a gem, a masterpiece. The venerable lady knew how to live. The wing reserved for her courtiers left nothing to be desired, and from the number of its rooms reserved for these gentlemen, testified that they must have been of sufficient numbers to warrant Catherine's reputation. The palace was and still is exquisite. It is now a museum which one can explore for a few kopeks starting at the private chapel with its extraordinary ikons and continuing through the tremendous length of the palace proper out into the art museum and terraces overlooking the spacious lake and grounds. The lake is used now for the people to bathe in the nude, the men and women separately and quite hidden from each other.

But the real thrill of thrills is the palace of Nicholas II. It remains complete in every detail exactly as he and his unfortunate family left it when they were so rudely disturbed to begin their exile to Siberia. The guide shows you the door through which this last of the Romanov dynasty entered his palace after the coronation ceremonies, the same by which he left, never to return. In his study one sees his desk, with all his little knickknacks still strewn around. His photographs, one from the Czarina inscribed in English, "To My Darling Nicky." It sort of tightens one's throat a bit. One never

seemed to think before of the mighty Czar of all the Russias as simply another poor deluded human being, a man loved and loving. "To My Darling Nicky"—there's a world of pathos in those four words. One sees his pipes, his guns, his Easter eggs, and the like. It is more the home of a well-to-do country squire than of a Czar. His bedroom is even a bit tawdry. His hairbrushes were shockingly in need of replacement. The Czarina's room would not appeal, of this I am quite certain, to a single one of my feminine readers. The furnishings are appalling, the walls littered with cheap chromos of a religious or mystical character. Even the ikons were not extraordinary. The ballroom is now plastered with propaganda.

Back in the city itself we went through the Winter Palace and the Hermitage, that most lovely of museums. It is a paradise for the lover of art. There one can see that most of Russia's masterpieces are apparently intact. But after all, I know nothing about the subject, and good imitations could well have been substituted without my knowing it.

We sat in one of the little parks looking out over the beautiful Neva to the fortress of Peter and Paul, the Winter Palace at our right, the extraordinary Admiralty building at our left, the magnificent domed cathedral of St. Isaac beyond, and watched the sun setting at half-past eleven at night. Then came a beautiful twilight lasting but a couple of hours, and the sun rose once again. The birds in those latitudes (Leningrad is considerably father north than Moscow and within the shadow of the Arctic Circle) must lead a helluva life.

They never know when it's time to go to bed or when to get up. We felt the same way about it.

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WE HAD reserved rooms in advance at the Grand in Moscow for our return. We had expected we would have at least a week's work in Leningrad. Also we had telegraphed two days ahead and, miracle of miracles, the telegram had arrived before us. But unfortunately the American Legion had preceded us. Apologies but no room. Again my Trust was frantic. We tried every hotel in Moscow. They only laughed. Finally we were going to be quartered with a private family, but the Supreme Council intervened. We were to get a room late that night.

A young American from Philadelphia with whom we had struck up a friendly acquaintance in Leningrad was in the lobby during our bickering with the *portier,* who knew us well by this time, and was honestly trying to help. The American insisted we go to his room—a single but, as always, with two beds. There we could wash up, change, and refresh ourselves. We made plans to get up a cot—he insisted we could put the cot out on the balcony where he would sleep and my wife and I could have the beds. It was quite sporting of him, but in the midst of our ablutions, there came a knock on the door and we were told most indignantly that the room was registered for one. Under no circumstances could we even sit there, let alone wash or sleep. Our American friend, after all, was a tourist, so he was furi-

ous. But my wife and I only smiled, said "Da, da, da" to everything, remaining unperturbed.

It was midnight before we returned from a dinner party at the home of a prominent American newspaper correspondent in Moscow. We had our room. The next morning, without further delay we found ourselves, suddenly and without warning, again on the Trans-Siberian bound for the Urals.

CHAPTER SIXTEEN

AGAIN AT THE MINES

AN AMERICAN engineer working in any foreign country is in a sense just as much a member of our diplomatic corps as is the actual representative of the State Department. The opinion of each and every person concerning America and Americans with whom he comes in contact is directly moulded by the reaction to his individual personality. This is particularly true of the American working in Russia. Here we have no professional diplomat to help us out of, or into, any misunderstandings which may arise. Here we must get out of our own scrapes and always bear in mind that the opinion toward America of those with whom we come in contact depends almost wholly upon our own personal actions.

I have explained in an early chapter that American mining engineers with foreign training have, for the most part, heretofore gained their experience in the Latin-American countries. And because of the well-known mining opportunities in these lands our profession has, in the main, prepared itself for such work by a

study of Spanish either in a university or outside. But in my experience, it is very rare for the American engineer to have a speaking knowledge of German—the language known by at least one out of every two Russian executives we met during our work for the Soviets—and certainly there was not one American engineer in ten thousand who had any real working knowledge of the Russian language, at least before he commenced his work in Russia. The great difficulties of the Russian language for a foreigner are too well-known to require mention.

On the other hand, while so many of the Russians of education speak German, comparatively few know English. This condition is further complicated by the fact that even though the Russian interpreter with whom we might be supplied speaks and understands everyday English, cannot be expected to know the English pertaining to highly technical and specialized subjects, English words and terminology that not one American in a thousand would himself understand, were he not trained for the engineering profession. We thus have impressed on us, in a most startling manner, the first great handicap of the average American engineer working in Russia —the great barrier of language.

Aside from the language problem, there are still even greater handicaps to our work for the Soviet Union. This is particularly true of the American who is working out in the "sticks," alone and not as a member of a comparatively large colony of his countrymen. This individual, to an even greater extent, represents all of America and all Americans to those with whom he is in contact. His job requires infinite tact, diplomacy, under-

standing, and patience. Not because the Russian people are difficult to get along with—quite the contrary; but rather because working and living conditions are so utterly different from his past experience.

Firstly, he is working, not for private interests with highly centralized authority and responsibility, but for the government itself. Secondly, he is working in a country whose internal psychology is that of a nation at war. Thirdly, he is in the midst of a brand-new and gigantic experiment in sociology and political economy. Next, he finds himself in the main cut off from the usual recreations and other features typifying his bourgeois existence wherever else he may be working throughout the world. Finally, in addition to the language handicap, he is confronted by (a) a suspicion directed more or less naturally under the present circumstances against any representative of a capitalistic country; (b) a conscious or subconscious fear of intercourse with foreign specialists on the part of the majority of the Russian people; (c) the possibility of jealousy, professional and economic; (d) the red tape and inertia existing wherever governmental control of industry is manifest; and (e) the inherently different psychology of the people, coupled with the knowledge that oftentimes on the report of the foreign specialist hangs the life or liberty of a Russian co-worker.

Yet all of the above is today being more or less successfully coped with by hundreds of foreign engineers working in Russia. The handicaps may be exaggerated in the mind of some American technicians to the point where they can no longer do their work efficiently; they may develop a very bad state of

"nerves," but for the most part—and this is particularly true of the mining engineer who has perforce "batted" around most of the world under all sorts of conditions—the American soon adjusts himself to his environment and finds most of the supposed obstacles eventually overcome or non-existent in his own individual case.

The approval of what I had recommended meant discontinuance of certain methods which had already been inaugurated. It also meant the probable imprisonment of those responsible for the former plans. But that there is a great deal of premeditated sabotage going on in Russia (today to a much lesser degree) on the part of those antagonistic to the present régime is obvious to most of the American specialists in Russia with whom I have discussed the matter. Certainly not all the mistakes or slowing-down of tempo can be attributed only to red tape, lack of practical experience, or ignorance. But it must be remembered that while the Russian engineers, at least of the old school, are possibly as fine theoretically trained technicians as any in the world, they have not had, in the main, since prior to 1914, an opportunity to study first hand the tremendous mass of new technique which has been developed abroad since that time.

Again at the mines, I enjoyed a comfortable office, and whatever facilities were available were extended to me in my work. There is, to be sure, a scarcity of trained engineering personnel, but a little patience and tact on everybody's part usually brought results. The Russian is extremely quick and eager to learn. The younger men assigned me were respectful, competent, and mentally alert.

Any recommendations which I wished placed into effect, I would discuss with the technical director, and if they were of sufficient importance, would be discussed at a special meeting of the entire technical staff. The technical director would then issue the necessary executive instructions. I found an open mind and a readiness to co-operate. In one case, to prove my ideas, I was given a group of mines over which I was placed in direct operating charge until the recommendations which I had made could be proved or disproved.

Oftentimes, where it was believed that the efficiency of any unit was lagging, I would be asked to step into the gap, take charge, and try to remedy the situation. I always found the director, engineer, and subalterns of such a particular unit more than anxious to work with me. The friendliest of relations, with no apparent jealousy nor antagonism exists, once a sympathetic understanding is set up by a foreign consultant.

Frequently commissions for inspection and the like would come out from Moscow or Leningrad. They would constitute the control or possibly would be making a study of whether or not the American engineer was being "exploited" to the fullest. Sometimes these commissions would handicap our work by the introduction of red tape. For the most part, they came to me for suggestions and consultation with constructive results.

However, I must emphasize again the Russians' love of voluminous and detailed reports. The experienced American engineer knows by training and instinct, as well as from his previous work, quickly and surely what is to be done. The Russian wants everything set down in writing and calculations. Then follows interminable

debate. But there was a way to overcome even this lost motion. Many of us found how to turn the trick.

Of all the variants to be found in the present-day Russian experiment, probably none is more pronounced than that of the life of the American engineer working in the Soviet Union. I have heard of an American living alone far from any city or village, in barely more than a hut. I have seen American technicians in Sverdlovsk living with their wives and children in a couple or more rooms in the hotel. In large colonies they may have modern, American type housekeeping apartments in buildings specially constructed for foreigners. Or they may be quartered in single or two-family houses supplied with every modern convenience.

In very large operations such as the Magnetogorsk development which has just within the past year gotten under way, and where there will be a large American colony, I am told that tennis courts and even a golf course are to be provided for the foreign engineers and their families. But let us leave hearsay and return to an account of our own actual and personal experience.

Upon our second arrival at Asbest, my wife and I were again shown to the Svedberg house. Now it was empty. Gone were our former friends. Svedberg was dead, the family scattered. We found the house too large for our needs and particularly depressing to us because of the absence of our friends. Upon expressing our feelings in the matter to the office, they understood. We were at once tendered one-half of a new and quite delightful two-family house, the other half of which was tenanted by the technical director and his family. Our side had

belonged to the former director, now in the GPU jail at Sverdlovsk.

The housing facilities were in charge of a special director who personally was responsible for our comfort. We were permitted to assemble such furniture and furnishings as were available either in the general store-sheds or in those quarters vacant at the time. The house had only been built a little over a year and comprised one of the new units of the rehousing program. It had a splendid location facing the lake, surrounded by evergreens, and was adjacent to the just-completed hotel. On the first floor was the typical Russian kitchen, maid's room, dining room with open fireplace, bath and storage place. There was a front and back porch. On the upper floor was the living room, bedroom, and a small room which we used for our trunks and luggage. The furniture, including the beds, was comfortable though plain, even severe. We had no rugs on the floors. The walls, inside and out, were stuccoed over the logs of which the house was built with asbestos plaster. There were two porches on this upper floor also, which afforded us delightful evenings during the summer. The "color scheme" was, as always in Russia, supplied internally and externally by whitewash. On the whole, the place was quite comfortable. Plain and severe to be sure, yet scrupulously clean and light, airy and cheerful. My wife was soon adding those touches necessary to make it really a home. Despite the deficit of material, wonder of wonders! cretonne curtains were forthcoming, also bedspreads. We pictured the walls with excerpts from American magazines.

The rooms were heated by the typical built-in oven,

extending from floor to ceiling. These ovens are of brick and so constructed as to form a portion of a wall or corner extending into adjacent rooms. They burn wood, which even when wet burns readily. As soon as the fire has been well started, the iron door of the furnace is screwed tightly closed and the wood, instead of burning and giving a quick flash heat, chars slowly, giving off a steady heat for several hours. This heat is absorbed by the heavy brickwork of the oven proper and is radiated through the rooms even several hours after the fuel has been entirely consumed. It is remarkable how really hot these Russian ovens can keep the houses, even at the prevailing winter temperatures of 40 to 50 degrees below zero.

While on this subject, the Russian adoration of closed living and working quarters is worth mentioning again. As soon as the weather turns at all cold, double windows are affixed throughout, and even the cracks are puttied. A door possibly six by fifteen inches is then expected to supply all fresh air requirements. Circulation is supposed to be effected by a vent built into the oven which runs into and up the chimney. This custom of sealing ourselves up for the winter led to some amusing incidents. Upon returning home one day, we found the aforesaid operation had been completed in our absence. I immediately got out a hunting knife and proceeded to dig out one of the double windows in the living room which would allow us to breathe normally even after our furnaces were going full blast. There was no comment from our maid, and that was that. But only for the time being. Some few days later, back, puttied and air-tight, was the storm window. Again I dug

it out. This cycle of operations was repeated possibly five or six times; and even though our very intelligent maid was quite expert in understanding our limited command of the Russian language in quite every other matter, yet in the window episode, it was completely unavailing. In cases like that the only effective step to be taken next is to become apparently quite angry. This brings about the desired result.

In the question of maids, we were indeed fortunate. A departing German engineer had told us about his former *maîtresse d'hôtel*—she was a good cook, honest, clean, a willing worker, and red-headed. We obtained her services. She asked twenty rubles (about ten dollars a month) and room with board. Her name, familiarly speaking, was Katcha. When we moved into the house, we found the former director's maid still there. She evidently went with the quarters. We decided to keep her also, at least until she found another place. Her name also was Katcha. We solved the problem of differentiation by designating our red-headed one, Katcha *Ideen*, and the inherited other, Katcha *Dwa*, (meaning number one and number two, respectively). Great was the hilarity upon our announcing to the interested parties the solution to the dilemma.

But all was not to be roses. As I have repeatedly mentioned, put a Russian alone on any piece of work where his is the entire responsibility and the piece of work will be quickly and well done. But divide the responsibility, and chaos may result. This latter proved to be the case with our two Katchas. Each one always thought the other was to do this or that particular duty, with the result that it was never or rarely done at all.

Number Two discovered that Number One was getting more wages, and then the fun started. Don't think for a moment that the matter would be discussed openly with us. The technique of the uneducated Russian is quite different. Number Two would come to my wife and say that Number One certainly could not remain, as the latter was, appearances to the contrary, soon to become a mother. Number One would report that Katcha Number Two was lazy and inefficient. Fortunately for us, since we liked them both, the problem soon solved itself by Number Two finding another place.

With her rival thus out of the way, Katcha One then thought she was entitled to thirty-five rubles a month, and as a compromise she agreed to do all the laundry. She really was a gem of a servant—she could get more out of the few ingredients available than any one in our experience. We were again initiated into such Russian delicacies as beef *à la Strogonov,* which under deft ministrations tasted excellent, even though the basic element was horseflesh instead of cow. Her accounts were always in order, and she was the soul of cleanliness. She would bargain with the peasants who almost daily came to our back door with every conceivable article of food from cucumbers to wild ducks as conscientiously as though she were spending her own money. These bickerings used to afford us one of our great sources of amusement.

One of the co-operative stores had been more or less set aside for the foreigners, in our case several German engineers from the firm of Humboldt and our own household. Here we could buy commodities to any extent available. Although we were supplied with

"books" to be used in our purchase of certain rationed commodities, we were not in any sense of the word restricted as to quantities which we could buy at one time. We found that the great difficulty would be that on a certain day, let us say, eggs would be in stock. We would then buy a case of one hundred, for there might not again be eggs for some considerable time. Naturally, without any other refrigeration facilities but a cellar, which, to be sure, remained surprisingly cold even in the hottest weather, food bought necessarily in such large quantities at a time often went bad before we could use it. Ice we could occasionally obtain from the hotel. Our own ice house had not been filled the previous winter. Speaking of ice recalls to my mind the utter astonishment of Katcha upon our first making iced tea. Even in the hottest weather—and those long days of the Ural summer in that latitude produce temperatures of over a hundred—the Russian will drink glass after glass of piping hot tea throughout the entire day. We, blissful in our ignorance, continued to drink ours iced, until finally the technical director in utter horror informed us that the ice we were using came from the lake with no inlet nor outlet, where horses which had died from the loathsome Siberian beast-disease had been disposed of. Fortunately, before leaving for Russia we had been inoculated with every serum known to preventative medicine. But I never drink iced tea now without there appearing before me visions of the Siberian horse-disease.

The foodstuffs which we purchased at the co-operative were always reasonably priced. When meat would be available—and there would be periods when we could buy it daily for weeks and others when we could not

for love or money buy a single gram—the prices would be as reasonable or even cheaper than in America. For example, we paid 72 kopeks (36 cents) for a kilogram of lamb—about two and a fifth pounds. We would pay six kopeks (3 cents) a piece for eggs, 24 kopeks a liter for milk, and so on. When the coöperative would be out of these or other commodities we could often purchase them from the peasants either at the bazaar or at our own door, when we would have to pay the inflated prices prevailing on the open market, such as 40 kopeks (20 cents) a piece for eggs, 5 rubles ($2.50) a kilo for meat, and so on. When it became chronic for us to pay a ruble and a half for a liter of milk with none available at the stores, I registered a mild and good-natured complaint with the manager of the co-operatives and shortly after we had milk, as much as we wanted daily at the gold prices.

I found that a great deal depended upon the personnel in the co-operative. The first manager who catered to our every want always seemed to have ways and means to supply us with our immediate necessities. The man who replaced him later would strike a good average for a few days, "and then the drought." A protest would precipitate a deluge followed by a lapsing back to the *nichevo* attitude. This probably explains the great divergency of reports emanating from Russia as to the cost of things and as to how Americans live in the Soviet Union. Whereas in Moscow there had been a virtual shortage of nearly everything, in the Urals we found an abundance—meats in great variety, beef, pork, lamb, butter, sugar, even excellent table wines and beer. We were in the center of an agricultural country.

The shortage in the large centers again seemed to me largely due to a breakdown in the transportation and distributing system, coupled with the lack of refrigeration facilities both in transit and in storage. In the winter just the reverse was true. Everything was to be had in Moscow, and we had a downright shortage in the Urals. For two weeks in December we had no meat at all—only horseflesh was to be purchased at exorbitant prices from the peasants. We lived on eggs, frozen fish, and *blini*. But in Moscow the famous Promparty trial had just been completed, the "enemy from within" had been exposed and sentenced to punishment, and the Moscow "front" was supplied with every conceivable foodstuff. The extremely low winter temperatures prevailing at those latitudes then permit the easy transit of perishables away from the areas of production to the large centers of population.

Thus we would live in periods of plenty followed by periods of less "luxury." To buy food as we are accustomed to over here is unknown in that part of Russia where we lived and worked. Everything available is purchased at the one store, from preserved fruits and vegetables from the Crimea to hunks of meat of local origin. Green, fresh vegetables, owing to the shortness of the season, were available only for about four weeks during the latter part of July and early August. Then we could get peas, beans, lettuce, tomatoes, and the like. On the whole, the American engineer and his family out in the "sticks" will probably find his diet monotonous unless he has the exceptional cook with which we were blessed. And our table was also augmented by many varieties of game during the season—wild duck, goose, dove, pheas-

ant, *gluckha,* venison occasionally, and even a bearsteak now and then.

Our amusement had almost entirely to be found within ourselves. We played volley ball with our friends from the office. We took walks. We rode. Everyone did everything possible to make us happy, and contrary to the general situation in Russia, our Russian co-workers visited us frequently and we them. Such occasions are always festive. The Russians love sociability. We would drink and smoke and talk and eat. The educated Russian knows how to drink and hold it. Hours would be consumed in discussing the philosophies of life and how we work and do things in America. More usually the topic of conversation would be our work at Asbest. We accomplished perhaps as much at these informal round-tables as at our offices. Chess was a great source of entertainment. Nearly every educated Russian plays the game and well. Cards are tabu as being too bourgeois, though my wife and I killed many hours at Russian Bank, which we found wasn't Russian after all, but Polish.

We again had our riding horses—this time with brand-new pigskin saddles, the stirrups of which kept breaking continually, due to flaws in the metal. Daily during the lovely hot summer days we would ride out over the steppes, through the forests and over the tundra. The Siberian and Tartar ponies are tireless. We would pick armfuls of flowers of every conceivable variety, stop at the river and *au naturel* enjoy a swim in the cool, clear water. We usually found our own private spots for this recreation, for the Russians we found were quite naïve about nude bathing, though at the mines at least,

the men and women seemed always to seek separate swimming places. Their psychology about the human body is natural, simple, unaffected, almost childish. But we still preferred bathing in private.

We would refresh ourselves on our rides to the emerald mines, 15 kilometers distant, by stopping at an occasional peasant home where *kvass* or *kumiss*—fermented mare's milk—would usually be available. There is a sanatorium in the Urals for the treatment of tuberculosis, where the main article of diet and treatment consists of *kumiss.*

Occasionally we would see a really enjoyable "movie," and very, very occasionally, an American film. We saw an old picture of Harold Lloyd's that summer and two or three other American comedies came out to Asbest. The Russians seem to enjoy our pictures above everything else, and the comedies especially appeal to their love of laughter. Then, too, we would occasionally have extremely good musical programs, even out at the mines, a balalaika orchestra, a string quartet, etc.—all part of the cultural program for the people. So, during the summer our life was interesting enough until the advent of the rainy season in September.

CHAPTER SEVENTEEN

THE WORKERS' AND PEASANTS' INSPECTION

IN AUGUST it was decided that my wife return to America before me. There had been three weeks of continual rain. A veritable sea of mud precluded riding or walking. From morning until night she was confined to the house, the running of which was by now so well organized as to hardly provide a diversion. The two engineers had been sent out from Leningrad by Mechanobra Proyect with instructions to work day and night until the plans for the proposed new mill were finished. This meant my being at the office after dinner, often until the small hours of the morning. There was absolutely no one with whom my wife could talk. All our friends among my associates who, with or without their wives, called upon us or invited us to their homes knew no English. My wife's only foreign language was French. Our friends knew only Russian, possibly German. So she had knuckled down to studying both of these and had gotten to understand something of both. But this is hardly enough to

keep an active young person occupied from morning until night.

Little things added to her state of nerves. She witnessed one of the worst cases of hysteria that I had ever seen. One of our engineers, on the brink of an accusation by the GPU, went to pieces during a conference. He screamed like a woman, cried like a baby, and shook like a leaf. It was my first experience with hysteria in a man. Yet so shattered had the nerves of the former bourgeois engineers become, through overwork, too many meetings, too many reports, the five-day-week which practically eliminated the day of rest for executives, and, above all, the day and night dread of possible arrest—so shattered were the nerves of nearly all that I wondered just when the snapping point would come and convert the place into a madhouse. I therefore could well appreciate the effect of our environment upon a woman, sympathetic and sensitive, without a definite work or objective to occupy her mind, without even one other woman with whom to talk. To cap the climax, we had finished all our books, and my office in New York had slipped up on our periodicals. With the hiatus in the arrival of our *Times, Saturday Evening Post,* and other magazines, she had not even them to look forward to. So we decided she was either to go to Berlin for a while or return to America to await the expiration of my six-month period.

We applied for her exit visa and waited. After a considerable delay and after both I and the office had moved heaven and earth, we learned that the visa would be ready "in a day or two." So we packed and shipped her luggage and went to Sverdlovsk. But the visa was not in order. Nor would it be for several days. That meant

that the tickets on the Express we had procured would have to be cancelled and no one knew when we would be able to get others. The days dragged interminably. How we missed the comparative comforts of our home at the mines! The food situation in Sverdlovsk had become as acute as at Moscow. But there was small incentive for those in charge to make a showing—we ate in the hotel dining room with everyone else. Even the Delavoie Klub no longer boasted a special menu. The one or two outside *stolovarias* were either closed or so dirty as to make any other recourse better.

We dined one night at the home of a friend. We could see and appreciate how hard he had tried to get together a presentable meal for us, with that true hospitality for which his people are justly famous. I shuddered to think how much it must have cost him to purchase the ingredients at the open markets. Sugar was then two to three rubles a kilo, or over 50 cents a pound. Meat might bring any price, never less than five rubles the kilo, often much more. A small, skinny turkey cost 25 rubles, a bottle of most inferior table wine, 10 or 12 rubles.

We spent the evening "talking shop" and listening over short-wave radio. It was thrilling out there in the Urals to listen in, first on a noted restaurant in Bucharest, then on Paris, Berlin, Warsaw, London. We could picture the gay, smartly dressed crowds, dancing to the music we were hearing out there in a different world, eating and drinking whatever they chose and in any quantity. We realized then more than ever the truth of the old adage about one half of the world not knowing how the other half lives. Yet Russia is not another half

of the world we know. It is a different world entirely. Our joy was complete when we heard the London trans-Atlantic operator killing time by chatting banalities to her New York sister. "'Elloa, New York, beastly weather over here, what. 'Ow's it in New York." "Swell, kid. But business 'slousy. S'long, London, time to eat now." This marvel of science was enough to stimulate the most banal of imaginations. It was past midnight Ural time. It was still yesterday in New York, early afternoon, two o'clock. In London it was dinner time. For us, it was tomorrow.

The next night we saw a Russian circus. Though it boasted but one ring and no side shows such as our American institution, it was really very amusing. There were several foreign acts, for with the depression becoming more and more intrenched throughout Europe, the Soviets were now finding it possible to import talent who were glad to accept their salaries entirely in rubles.

The weather cleared, the mud dried up, the sun again shone cheerfully. The GPU had not produced the visa. My wife decided she could stick it a bit longer. So with instructions to cancel the exit permit, we returned to Asbest. A week later the passport came to our office at the mines with Soviet residence limited to five days. That meant she must be over the border before the expiration of that time-limit. It was patently impossible. All sorts of red tape and further explanations had to be made at Sverdlovsk to get an extension. But the extension was limited to one month. This mix-up, intentional or otherwise on the part of the authorities, automatically decided the ultimate departure of my wife for us. During the interval we had the exciting treat of a visit from

the brilliant journalist, H. R. Knickerbocker, whose series of twenty-four articles, "The Red Trade Menace," in the *New York Evening Post* has since deservedly won him a Pulitzer Prize.

Three weeks later we returned to Sverdlovsk, this time to really separate until, as we thought, late December, when I should be back in New York. Actually, it was nearly March before I arrived home. This time there was no room for transients at the hotel. More and more the available rooms had become permanently occupied by residents, practically all Russians. Each trust was building its own hotel and apartments for its office workers. Ours—*Dom Mineralrud*—had recently been completed. It was constructed of logs around a hollow square, more than a mile from the hotel, which constituted the nearest eating-place. The rooms for traveling executives were lighted dimly by kerosene lamp. Two cots, each with planks instead of springs, one chair, and a table constituted the furnishings.

The Express was scheduled to leave for Moscow at eight in the evening. We learned from an acquaintance in the Railway Commissariat that it would be at least midnight before its departure. We tried vainly in each of the four kinos to procure tickets. We returned to the lamplighted room to sit and wait. The strain of impending separation, my fears at the long trip which my wife must make alone across Russia, my worry at whether our friends would be in Moscow at that time to meet her, granting the telegram ever reached them, further worry at the difficulties of procuring hotel accommodations during the tedious process of awaiting transportation to Berlin, getting dollars from the State Bank with a per-

mit to export this *valuta*, the getting of necessary foreign transit visas—it was all rather nightmarish to me. But a commission was arriving at the mines from Moscow the following morning, and though the director had graciously offered to arrange my accompanying my wife to Moscow, I realized the impossibility of doing so.

At midnight we went to the station. The latest news was that the train had left the previous station and would arrive "at about one o'clock." The baggage was checked and tickets purchased. Then, amid that ever-present swarm of humanity, we picked as free a spot as possible—the baggage counter—and waited. A very pleasant German who spoke quite a bit of English and was also bound for Moscow on the Express introduced himself to us. His politeness and concern was unaffected. It would be a pleasure if he could look after *die Gnadige Frau*, if she would accept the courtesy. He was soon joined by his interpreter. I started to speak German to the latter. But in the finest of New Yorkese, he grasped me literally around the neck and hugged me. He was a great chap and was to prove a perfect boon, not only to my wife on that trip, but to me when I finally got back to Moscow. He was a communist sympathizer, had attended the City College of New York and, originally born in Russia, had returned there to throw in his permanent lot with the Soviets. A most likable fellow, with one of the quickest minds and keenest senses of humor I have ever met.

Waving to a porter, he gathered us up, and following his lead upstairs, we soon found ourselves in the comfortable office of the station GPU. Here the two officers on duty did everything possible to make us com-

fortable. It had turned bitterly cold for September. They procured steaming hot tea. The chap from C.C.N.Y. produced excellent cognac. We soon responded to treatment, our blood again in circulation. The younger of the GPU officers, a most attractive man in his early thirties, spoke little German but a fluent French which he had learned in the army during the War.

Toward dawn a third officer joined our little group. He wore the belted leather jacket over his brown tunic. He too was quite young. He stood well over six feet—strong, powerfully built, yet wiry. He had a sharp, hawk-like face, handsome in a Semitic way. His dark eyes snapped fire; he had the gaze that one instinctively tries to outstare. The station GPU's jumped to attention. One whipsered to me, "Chief of the Ural Division." There was nothing but hatred, an all-burning egotism, a sense of omnipotent power in his antagonistic personality. Yet he mentioned no word to anyone. For hours he simply sat there or paced to and fro maintaining a sphinx-like overbearing silence. In this man there would be no pity, no quarter. Only steel and lead. The way that man undressed a woman by his gaze, the impertinence of his burning glance, disdainful of the presence of all others, aroused an antagonistic something in me. Here was a type of Soviet official I had never before met. I thanked heaven nothing conceivable could put me in that man's power. I trembled for a moment thinking of my wife in the same car as this fellow. Then I laughed at the state of nerves which could produce such hallucinations.

The Express did not arrive until eight o'clock in the morning. This had been our second night without

sleep, for we had left the mines on a new train leaving for Bajenova at four in the morning. This train, a summer connection, permitted our getting a "soft" car on a through Trans-Siberian "slow" train to Sverdlovsk, thus eliminating "the stinker." So the moment for parting had come. My wife is a marvelous sport about these things. She doesn't break down or give way to her emotions—at the time. I saw her to her compartment. The German and his interpreter assured me they would take care of her both en route and at Moscow. I arranged the purchase of both places from the attendant. I thanked our guiding star for the fortuitous happening-along of someone so friendly and understanding, one who knew the ropes, but above all who could speak New York English to her.

The Express pulled out for the West. I could see my wife's wan face pressed against the glass of the window. Still attempting a smile, she blew me a kiss and disappeared from sight, I could catch but a fleeting glance of the plucky girl giving way to her tears.

Almost simultaneously I noted a train on the adjacent platform pulling out eastward bound. There had been no train scheduled for Bajenova until afternoon. I took a chance and jumped it. I knew that any "slow" train going east must stop at that station. Nor was I wrong. The train I had so luckily caught was the one which had been scheduled for yesterday afternoon. I entered the one "soft" car. The attendant told me my tickets were not in order. Giving him a five-ruble note and fatigued to death from lack of sleep and pent-up emotion, I murmured the magic word "*Amerikanitz.*" I had two hours sleep before me, at any rate.

The attendant awakened me at Bajenova to hand me my *kvitancia* for the additional fare. He was the only employee of hotel or railway throughout our entire stay in Russia who refused to take a tip.

The better to keep awake I rode on the little gas-electric locomotive from Bajenova to the mines, where I found the commission had just arrived.

I was alone in Siberia.

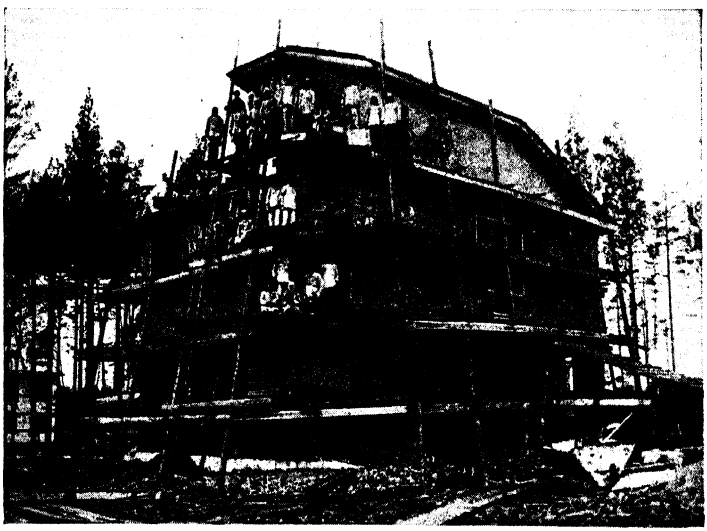
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THIS COMMISSION from Moscow comprised some of the operating heads of Mineralrud. It was approaching the end of the fiscal year. They had come to confer upon the progress of the work, the results of the past (the second) year of the Plan, and to discuss norms, appropriations, and the like for this present and most critical third year of the Five-Year Plan. They first spent several days over at the emerald mines which I had already visited, whence come some of the world's finest stones. It is the opinion of many experts that these Ural emeralds are equal, in many cases superior, to the Colombian or Indian. The gem occurs in a matrix of compact, crystalline, highly micaceous schist. The deposits, still worked by the most primitive methods, not even partially mechanized, are located less than 15 kilometers to the west of Asbest.

The presence of this commission naturally kept me working to all hours of the night. It provided a welcome distraction against my loneliness. On several occasions I would prevail upon them to sup with me after leaving the office. We would be joined by the technical director,



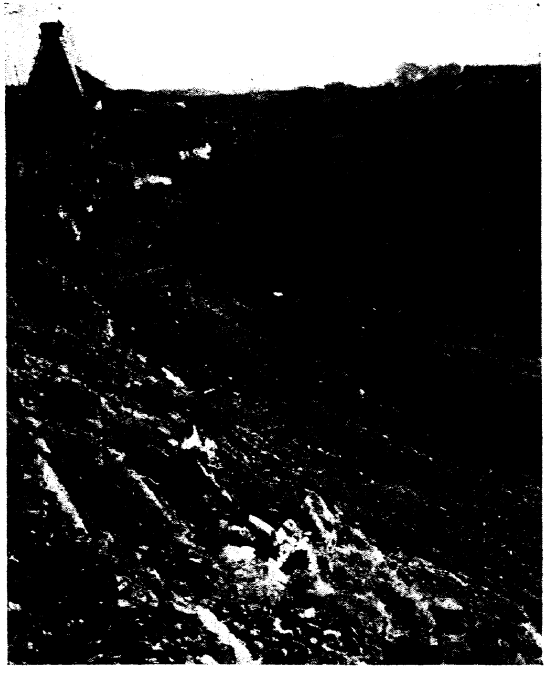
HUNDREDS OF THOUSANDS OF RUBLES IN IMPORT MATERIAL REDUCED TO SCRAP IN THE MILL FIRE OF 1929. In background, new asbestos mill nearing completion



THE GEOLOGICAL MUSEUM AT ASBEST



INCLINED HAULAGE PLANE FOR HOISTING ASBESTOS ROCK FROM MINES TO MILLING-PLANTS



NEW SHAFT FOR HOISTING ROCK DURING PROCESS OF MECHANIZATION

the economist, and other engineers. The maid, Katcha, had, since my wife's departure, redoubled her efforts to provide a variety of diet and to keep the house spick and span. She was indeed a tireless servant. When we returned at midnight or later from the office, the fire would be going in our one open grate, eggs would be scrambled according to my taste, and fragrant coffee from home—ever amazing to the Russian because of its cheap price and attractive packing—would be sending off its delicious aroma. With such lures for the inner man, we would continue the discussion of the work until very late. Yet, at seven-thirty the next morning the faithful Katcha would be at her chores.

At last the engineers from Leningrad finished working with me and departed. The original plans called for a mill of such and such daily capacity. Despite the adoption of my recommendation for a plant nearly three times that size as more efficient and economical, the *praesidium* approved the original plans. These being completed down even to the detailed working drawings, it was then decided to increase the capacity some 50 per cent, and we had worked along these new lines after their men had come out from Leningrad. Another radical change was made in the technical norm. Once more we started from the beginning and finished a new set of drawings, only to receive a new set of instructions setting the proposed capacity at the figure I had recommended almost a year before!

It takes infinite patience to work for the Soviets, as the history of the construction of "Mill No. 3" proves. Two years before, in New York, I had drawn preliminary plans. Then a project was received from each of Ger-

man firms, Krupp and Humboldt. The former technical director, now thoroughly discredited by his work, the dubious outcome of which I had, the previous year, been forced to predict, had also prepared a set of drawings. The Mining Design Bureau at Sverdlovsk—Gipromez—had made a complete set of drawings, then came Mechanobra's, then two additional variants by their engineers working with me at Asbest, then, finally, a completely new one upon which I was now engaged. That makes nine sets of plans in all for a mill supposed to have been started months before. We were only beginning a new set of drawings which, when completed, would have to have the approval of all sorts of commissions and academic bodies.

The German-built mill had been running officially since May, although the Trust had not accepted it. Each month the date of taking over the plant formally would be postponed. Commissions and consultants from various Soviet organizations came and went; report after report was written. The high executives of the company in Russia came out to Asbest. I was invited to the meeting. I had written critiques and recommendations. There stood millions of rubles in investment—practically idle; it would limp along on one or two of its three units for a day or so, and then something would "go pot." Mechanically, as well as technically, it appeared to be fundamentally bad. The year's proposed production of asbestos had included a substantial tonnage from this plant. However, although finished in May, its actual output by the end of the year was comparatively negligible. Yet the records showed 1008 employees standing idly by from day to day, despite our critical shortage

of labor—averaging under 60 per cent needed for the Plan!

Inasmuch as the mill had not been officially accepted by the Trust, we were powerless to do anything but make recommendations. I begged them to turn over the plant to me. I showed them how a few simple changes would at least better the quality of the production and improve the mechanical reliability. But to no avail. The president was away. No one dared to take the responsibility, even had it been practicable to eliminate the Germans from the picture at that time. The director, who always had co-operated with me 100 per cent, was unflagging in his courage, and had vision and confidence in our work, at one time started to change around one of the units. Again Moscow stopped him. A *bolshoi skandal* loomed imminent. Already repercussions were being felt in Sverdlovsk; certain professors and engineers attached to the District Council were under fire; further arrests appeared inevitable.

However, despite the inappreciable tonnage from this expensive new plant, the output had been practically doubled since we first appeared in the picture. This had been accomplished, not by increasing plant facilities, but by steadily mechanizing the mining methods, as well as by certain changes and modernization of existing plants —the so-called "rationalization" process. The installation of a few unique though temporary expedients and better co-ordination of various features of the mining and milling processes were preeminently helpful.

My power-shovel methods of mining had been inaugurated during the interim between our first and second trips. The *praesidium*, with typical impetuosity, had

neither awaited my return nor conferred with me long-distance to New York, the result being that eleven of these shovels had been ordered, only five of which were received before I finally left the mines and all of which, to my mind, were not the most suitable for the work they were to perform. Some two hundred-odd steel cars, of ten tons capacity, by no means the best type for our work, had already been received—yet they had not ordered the necessary rock-drilling equipment required by the method. To drill the holes of necessary depth, the expensive diamond-drill, used for exploratory purposes and not for the placing of explosives, had to be impressed into service. To reduce the amount of import material, since the *bortz'* or carbon for the cutting bit is not found in Russia, they used brilliants, either confiscated or purchased under the *valuta* act. When the first of the pneumatic drills of sufficient power and proper size did arrive, no one had thought to order the accompanying drill-steel to fit them.

So it was with many phases of the work. I shall never forget waiting a month for a little three-ton locomotive—the only one available—to be repaired for operation in one of the opencuts. It was essential to the methods we were installing. I warned them to get everything in readiness to receive it at the mine. Finally the shop turned it over one night, and we were to let it down the long steep slope into the pit. Volunteer "shock brigades" had been mustered to help in the work, and hundreds turned out to see the first locomotive being lowered into the asbestos mines—the first to replace age-old horse haulage. At two o'clock in the morning, amid the approving shouts and songs of the workers and by-

standers, the job was successfully completed. A day or two later the engine was put to work, but once the novelty wore off, its operations slowed down. Bridges at the bottom of the pit had to be strengthened, rails replaced, and so on. No one had anticipated these attendant needs.

I cite the above examples of lack of co-ordination and Soviet blundering without malice and merely to show the tremendous inertia and psychological difficulties to be overcome. Racial characteristics must be changed. The *nichevo* temperament must yield. A mass-production state of mind, typical of the American tempo and, to my mind, not even approximated in any other country of the world, must be inculcated.

But despite the handicaps of waste-motion, lack of co-ordination and downright ignorance, the results speak for themselves. And it is results that count. Despite the tragic incidents surrounding the German-built mill, despite the equipment purchased at so great a price in *valuta*—equipment ill-suited to the job to be done, despite all these daily occurrences, the output of asbestos from these mines had jumped in two years from 30,000 metric tons to 56,000. The costs had been reduced, the number of workers also, thereby releasing men for construction and "rationalization" work. And during that time a completely new town had arisen with "apartments" for over 40,000 people, streets, water supply, house of *Kultur*, hotel, geological museum, technical trade-school for 1,200 pupils, hospitals and clinics, and a brick factory capable of turning out 5,000,000 bricks a year.

Mistakes are not necessarily final.

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Four things stand out in my mind during the last quarter of 1930. First came the absolute shortage of rubles. For over two months the men were not paid—they were given scrip and credit at the co-operatives. A *protokol* from Moscow insisted that all arrears be met by the first of the year, resulting, in late November and December, in a flood of brand-new three and five-ruble notes bearing the same serial numbers. I received a certain amount of Russian money monthly to meet my household expenses. In October, payment even to me, a foreigner, was held up. When I did receive rubles, the crisp new bills all bore the same number. When my maid spent these in the co-operative and I would receive my next month's payment, the same numbers would come back to me, this time not quite so new.

The reason for this shortage is easy to explain, despite the large emission during the year. The harvest had been exceedingly good. When the collectives had purchased the grain from the peasants, they had to pay for the surplus in cash. The result was that the peasants and, to a lesser extent, the workers, had nearly all of the money out of circulation—unwillingly hoarded. The breakdown of the light industries resulted in there being no consumption commodities available for purchase at the government stores. The rubles thus tied-up did not find their way back into circulation. Hence it was that, in the beginning of 1931, the powers-that-be reestablished the open markets.

Concurrent with this state of affairs was the nation-wide ballyhoo attached to the famous Promparty trial when Professor Ramzin, one of the greatest authorities

on thermodynamics in the world, and seven other "arch-conspirators" of almost equal prominence and achievement, self-confessed and self-debased, were tried to the denunciatory blasts from newspapers, parades, sound-movies, and other propaganda facilities. These men "admitted" sabotage of the light industries, the food-distribution system, and the railroads. They "admitted" they had been subsidized by France and England. But by that trial the Soviets killed about five birds with one stone. First, they "explained" to the people the breakdown of certain industries. Second, they similarly "accounted" for the shortage of certain commodities. Third, they called poignant attention to the capitalistic "enemy from without," "proving" that their phobia concerning foreign intervention was no myth and thus consolidating the home front. Fourth, by eventually commuting the sentences to time-in-prison from death-by-shooting (the manifesto of conviction decreed that there would be no appeal from the death sentence), they showed the world at large that the Kremlin really had a heart. (It was not emphasized that such a sentence means that the "prisoner" continues his previous work as before, but at greatly reduced salary—and these men were irreplaceable in their respective capacities.) Fifth, after the trial had been finished and the enemy conquered, all available commodities were rushed to Moscow to prove that sabotage also had been hindering prosperity.

The open-market stores so created should go a long way to bring back to the treasury the rubles concentrated among peasants and workers. The inflation existing today and at that time is easily proved by the prices placed on commodities sold by any quantity without ration cards

or books. Caviar, for example, would cost (January, 1931), if and when procurable at the co-operative, two and one half to three rubles a kilo; at the open markets the cost would be 30. Cognac of the best sort would be priced at 25 to 30 rubles a bottle. Goose, duck, and chicken, 7 rubles the kilo; smoked sturgeon, 12 rubles; herring, 4 rubles; apples, 4 rubles (imagine apples at a dollar a pound!); bologna, 10 rubles; cheese, of the Edam type, 15 rubles; of the Swiss, 25 rubles (again, imagine Swiss cheese at six dollars a pound!); and sugar, bartered for in substantial quantities from Cuba with wheat, 3 rubles a kilo, or 75 cents a pound. The *New York Times* quotations on sugar at that time in the American market were under two cents. Yet these stores were always crowded from early morning until past midnight, proving that funds were indeed concentrated in the hands of the individual.

Comparing co-operative prices with those of the open markets, I would say that, at the beginning of 1931, the Kremlin decided the inflation ratio should be between seven and ten to one. That this is no idle theory is sustained by the fact that I, as a foreigner, would be approached at the theatre and at the hotel, or even on the street, by absolute strangers and offered rubles at about ten to the dollar. Working as I was for the Soviets, I naturally refused to buy these bootleg rubles. In Berlin, one would be offered rubles as high as twenty to the dollar. Russia's settlement of the fisheries question with Japan was at better than four to the dollar. The Korean Bank was said to have been closed because of illegal dealing in foreign exchange. One can see now why the traveler must convert his foreign currency at

the border and the reason why, if he has too many rubles left over at his departure, he cannot export them. Besides, why bother with bootleg rubles when five-year-old suits bring two hundred rubles each and one has all he can do to refuse a thousand rubles for a portable typewriter?

The second salient incident concerns the arrest of three young, hard-working, and extremely capable engineers at Asbest, two of whom had been White officers during the civil wars.

For the reader to understand the charges, I must disgress a bit. One of the most deleterious of all foreign substances to contaminate asbestos is wood. At the beginning of my first trip to the mines in the summer of 1929, I had dwelt at great length on this matter. For nearly forty years the mines had been operated by hand methods, the wood required for the operations having accumulated in the pits. As soon as power-shovels or other mechanized methods would be installed, these blocks and chips of wood would be scooped up, sent to the mills, and splintered, but not removed, by the extraction process, and so would end up in the finished product. Upon my return to Asbest, I hammered and hammered upon this point for over a month before I got it over. Then we had "shock brigades" of thousands of men, women, and children going over each mine and mill with a fine comb, removing unnecessary wood. Hundreds of cubic meters were removed from only one mine. But the damage had already been done. The power-shovels had been introduced during my absence in America. Snow then covered the ground. Wood

got into the finished product, and a complaint came from a buyer in England.

The chief mining engineer, chief millman, and one other supposedly responsible for this condition with which, with the snow covering the deposits, they could not possibly have coped, were arrested for counter-revolutionary activities, the penalty for which is death. I offered to testify in their behalf—the first time I had ever entered into the political scenes about me. I could not stand by and see these chaps, with whom I had worked daily and of whom I had grown to be exceedingly fond, go to their death on such an absurd charge.

Two members of The Peasants' and Workers' Inspection—popularly called in Russia the "conscience of the Communist Party"—came out to Asbest at that time. One had been the head of the dreaded Tcheka in the Crimea. He was, I believe, an Armenian. The other, who spoke German, was a Lett by birth. Both were exceedingly intelligent and quiet, with keen analytical minds, polite and efficient. They first wanted to know if I, as a foreign consultant, was being utilized to the fullest. I explained wherein I thought not and also exposed the recent obstructionism which had just become manifest to me. My engineer assistants were being sent to Moscow, Sverdlovsk, and Leningrad, and I had only two young lads, willing and quick to learn, but still only draughtsmen inexperienced in mill design. I then told them of the passive resistance of the workers—how one had dropped a tool into a machine, how another had used a wooden pole to pry off a screen covering in the new mill. I had told the latter, "*Derevo otchin plokchoi v'asbestom*" (wood very bad in asbestos). His answer

had been a long drawn out "*N-i-i-i-chevo—tchorni chleb kazhdie dyen tozja otchin plokchoi*" (What the hell—black break every day is also very bad). I showed how impossible it therefore was for any engineer to be responsible personally for the occurrence of wood-chips in the fibre, especially as we were notably short-handed in overseers.

I was allowed neither to make an affidavit nor to testify. However, the charges were changed to a slight degree of malfeasance, the penalties to from six to eighteen months in jail, depending upon the responsibility of each of them, with the alternative of returning to their jobs, living at home, and paying a fine of half their salaries for the period of the sentence. The trial had been entirely open, everyone attended, and the procedure was impressive. Counsel was permitted the defendants.

The third incident, in which I was also to play a rôle, is typical of what happens to one working for the Soviets. There had lately been a great deal of housebreaking and burgling going on. The house we lived in on our first trip had been entered and the engineer who lived on the second floor with his wife had had all his clothes stolen. By now the reader can well picture what a genuine tragedy this constituted. Then the technical director, who occupied the other half of our two-family dwelling, caught a thief at work, but the shells in his shotgun failed to explode, and the fellow got away. So it was decided to give us an armed guard. An old man was given the position, and, armed with a military rifle, paced back and forth around our house from dark till daylight—at forty or fifty below zero no sinecure.

Needless to say, he spent the good bulk of his time in our warm kitchen chinning with Katcha.

On the November night of the celebration of the Revolution, I had been to visit my friend the apothecary. He was a delightful man, educated abroad, who had seen and known life—a man whose only thought was his work, as is typical of the Russian professional worker. His record of achievement had been excellent. The apothecary's shop at Asbest was supposed to have been brought by him to a state of efficiency foremost in the entire Uralmedtorg. After tea, we walked back to my house across the frozen lake. We played chess, talked, and played the gramophone. Like all Russians, he adored music. And similarly, like most professional men of middle age in that country, he had the typical broken-down heart. He had just returned after several days in the hospital, which had precluded his sending the shop's receipts to the State Bank with the special courier who made the trip to Sverdlovsk twice weekly. Due to the shortage of money, the law insisted that these receipts be forwarded to the bank on time.

About nine-thirty our telephone rang. It was his assistant. The shop had been broken into and robbed. I thought my poor friend would have a stroke then and there. I gave him a glass of vodka, and together we started off over the ice. The shop was in a terrible state. Usually so spick and span, orderly, and clean, it was now chaotic. His little office was in great disarray. His desk had been forced open and his papers strewn about. Approximately, fifteen hundred rubles had been taken, as well as my friend's food-book, his passport, and the X-ray photos necessary for the treatment of his illness.

It seemed a spite-job by someone who knew the ropes.

The military police soon arrived, a cocky little chap of an officer in charge. Complete notes, interminable questioning. Two days later my friend was arrested and imprisoned in the criminal jail to await trial. He minded nothing at all but the reflection on his personal integrity, the slur on his organization, and the blow to his work. The heads of his trust came from Sverdlovsk. They scoffed at any hint of this man's dishonesty. They testified to the police that he was their best worker, the highest-class organizer and pharmacist in the entire trust. He had saved the trust thousands of rubles. They checked his accounts and inventory. Everything was in perfect order. The trust even offered to make up the amount which so obviously had been stolen by burglars. * But to no avail. My friend was removed to the hospital, finally to be released under bond, which three Communists had to certify. I made out a complete affidavit testifying to his alibi. At the trial, a month or so later, he was released with a small fine for not having arranged for the deposit of the funds before the holiday.

Here, then, is a concrete refutation of the statement that there is no justice in Russia. Stupid mistakes are made continually. But rectified.

The fourth and last thing which stands out in my mind during the end of 1930 was the return of the president of the Trust from America. This in itself, I admit, sounds prosaic; however it led to a series of exciting events. Let them rest while I add one or two minor points to the picture of Soviet Russia which I

* A Russian thief always leaves his excretion in a prominent place as a sort of trade-mark of his calling.

have tried to build up through retailing my purely personal experiences and observations.

The shutting-down of the plants during the celebration of the October Revolution was accompanied by a similar stoppage of the power plant at Egorzshino. Somehow or other, either through the ignorance of the workers or through carelessness or mechanical defect, when the load was removed from the main turbine, the governor stuck. In any event, it "ran away"—exploded from excessive speed of rotation! This resulted in a serious shortage of energy when work was again resumed at the end of the three-day holiday, and this in turn meant that the Plan for that quarter could not be fulfilled. It entailed throwing more workers into hand-production, curtailment of construction, and putting the entire operation again out of balance.

The other peculiar quirk in the Soviet system is more ludicrous than serious. The import duty on those home commodities near and dear to the American engineer's heart was excessively high. So, to make life more tolerable for the foreign technician, a special *akt* was passed in the summer of 1930, greatly reducing the duty on certain foodstuffs, tobacco, soap, and clothing. The act was ratified in late July and made retroactive on all imports to the previous April. In accordance with the law, each foreign technician, no matter what his capacity, working for a State Trust, must be given a copy of the protocol and a translation in his native tongue, giving the new duties and the amount of each commodity one was allowed to import per month.

Thus we were allowed to bring in, under the new tariff, 500 grams of tobacco, a kilo of coffee, and so

on. I immediately cabled my office accordingly. The office in Sverdlovsk received all letters and packages from the local custom house, and would pay the duty for our account. My wife had several pairs of silk stockings—the first package to arrive. They had been sent from New York in July and were received in October. Their cost at home had been a few cents less than $12, but the Sverdlovsk office of the Trust had paid out 135 rubles in duty! I immediately complained to our office manager and there ensued a lengthy correspondence with the main *Tamozshna* at Moscow. Just before I left the mines several months later, the credit came through. The new duty for foreigners was a small fraction of 135 rubles, the equivalent of that amount in gold on approximately a ten to one basis.

I wasn't so fortunate with my coffee and cigarettes nor with a sheepskin coat. One time the first two items would come in with three to five rubles duty, the next time the absolutely identical package would cost me thirty—$15 duty on a pound of coffee costing under fifty cents! With all my protesting both at Asbest and Moscow, never did I get credit for the difference. I gave our head office the customs' receipts, a copy of the protocol, and the account from Uralasbest, but that was the end of the matter. I was told that the entire account was to be straightened out at Amtorg's office in New York. The same applied to the $33 in rubles paid on the coat and the additional 100 rubles a month for the feed of my wife's horse which the president of the Trust added to the reasonable charge which had been affixed by the commercial director. But in New York, Amtorg could not change the account as sent by

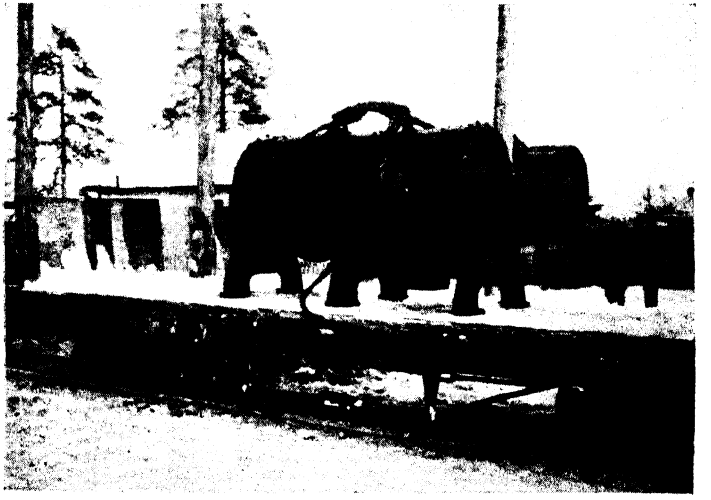
Moscow. This "chiseling" of the last dollar in *valuta* probably indicates how sorely pressed the Soviet is for gold.

The president arrived early in December. I had one conference with him shortly after his return, attended by all the staff. He was dressed like a New York "big business" man—well-tailored suit of fine material, blue shirt and tie, a meshed-band wrist-watch, quite conspicuous in those surroundings. It was soon all over the village that he had brought a top hat to Asbest! *Amerikanski tempo,* now more than ever, was the byword. A completely new technical norm for everything was the order of the day. Canadian technique must be copied in every detail, no matter whether it applied to the Russian deposits or not, no matter whether cement and structural steel were "deficit materials" practically impossible to obtain for our work. No matter that the Ural rock is softer, the asbestos harsher than the Canadian. No matter the psychology of the workmen available. Less matter that mistakes had also been made in Canada. Still less matter that the methods in use in Quebec were largely necessitated by the areal confines of private property ownership and the depth of the workings which had been operated intensively for decades. I saw trouble ahead.

The following day or so I received a letter from the *praesidium* demanding certain things to be done by me within two weeks. The utter impossibility of the demands were immediately evident. Among such I was to *prove* that a certain process of extraction which I had invented was indeed mine—and I had two weeks to prove it. Within the fortnight I was to deliver plans,



FIRST OF THE ELECTRIC SHOVELS IN THE MECHANIZATION PROGRAM AT ASBEST



ROCK-CRUSHER MANUFACTURED AT THE TRUST'S SHOPS, ASBEST, 1931



COBBLERS AT THE BAZAAR, ASBEST



PEASANTS AT THE OPEN MARKET, ASBEST

specifications, calculations and blue prints pertaining to all patents in use in the asbestos industry of Canada and the United States. I simply ignored the demands and waited, continuing my work in the meanwhile and asking that any changes in technical norms be made in writing, according to the terms of the contract.

The time for my three months' leave of absence had arrived. I demanded my passport. Two weeks later, on Christmas day, despite the contract particularly calling for arbitration of all differences, I received a letter annulling same. I again demanded my passport. During the interval I had received a written norm for a project —the first written specification I had received during all those months in Russia. This was followed by a demand that I turn over without further delay certain drawings upon which I was still working or that there would be invoked against me due process of Soviet law. The office told me that the president was threatening to send the military after me.

I immediately went to the head of the local GPU and told him the entire story—the repeated insults, the holding-up of my passport, the refusal to give me rubles. I received full and courteous attention. Two days later the president was called to Sverdlovsk by a *blitz* telegram. The two members of the Workers' and Peasants' Inspection with whom I had worked previously returned to Asbest. They told me that they had practically been ejected from the office of the *praesidium*— they had never witnessed such a display of temper. They spent a great deal of the time in my house, making detailed and voluminous reports which upon their return to Sverdlovsk they sent by special courier to Moscow.

Then came an order from Moscow insisting that the Trust turn over its Egorzshino power plant to the Ural Super-Power Trust. The *praesidium* answered categorically, no. There was the devil to pay. A vice president—a Communist—had himself transferred to Sverdlovsk. The entire morale of the organization was breaking.

When my passport finally came through it carried only a five-day permit to remain in the Soviet Union. It was patently impossible to be across the frontier in the specified time. It had to be returned. I again waited. Finally, I said good-bye to all my friends—friends who had become really dear to me. I arranged for the care of our dogs, little Blackie who, by now, understood words in three languages, and her black-and-white-spotted son called Highball, the pronunciation of which the Russians, having no "H," distorted into *Guyball.* Shivering in the icy January night, at two o'clock I took the little train for Bajenova.

The breakdown in the transportation system had reached its zenith, and the station at Bajenova was jammed with a mass of humanity waiting for trains. The little buffet was serving a thin soup whose only nutrimental value was a hunk of rancid fish, some boiled meal, a hunk of dry black-bread, and tea, which was hardly more than hot water. On all sides was sullen quiet. A worker, leaving Asbest for the East, made room for me to put down my bags as a seat. "*Otchin plokcha, otchin plokcha*" (awfully bad, awfully bad), was all he said. I was an *Amerikanitz,* to whom he could speak as he wished.

At Sverdlovsk they had no fuel for the houses.

The offices, the schools, and even the hospitals were freezing. Everyone worked in his overcoat, if he was fortunate enough to own one. Sverdlovsk was the center of a huge timber country, yet the city was even without wood. The hotel was crowded, as was our *Dom Mineralrud.* I slept on a leather couch in the home of a friend that first night. Then I located my two friends of the RKI. They had a third man in their room at the hotel, but they put him out and gave me his bed and did everything possible to make me comfortable. They divided everything with me, and we followed the typical Russian custom of talking into the small hours of the morning.

No one knew when the Express was expected. No one even knew when it was due. Schedules had been so frequently changed. One merely went to the stations and camped until any train came along going his way. My roommates from the RKI had had my passport extended a month, the previous date of exit being long past. They arranged for transportation. The train I finally took was sixty hours late. No one knew whether it was Thursday's or Saturday's train. The tales the passengers on that Trans-Siberian Express told me were awful. The locomotive was burning wood—with 63 degrees of frost coming across the Siberian wastes. The cars were incrusted in snow and ice. Inside, the temperature was nearly freezing. Food had practically run out, nor could it be replenished en route. The main meal had resolved itself to a tiny portion of soup, roast goose —probably bought from some peasant along the line— and potato, a spoonful of canned peas and gelatine for dessert. There was weak tea, no coffee. One could not

eat the soup because of the grease. For the other meals they served a bit of cheese or salt caviar on black bread. One could not even get mineral water, as the bottles had exploded from frost.

I spent more than two weeks in Moscow. I had a comfortable room at the Grand, though without bath, and the price had been raised to 15 rubles per day. Things had again changed on the "Moscow front." The early summer shortage of everything had given way to plenty, now that the Ramzin trial was over. But the prices were dreadful. One paid more than New York speakeasy prices for beverages, and two, even three rubles for cheap cigarettes at the hotel—the better sorts were still unavailable. The food was good, the variety ample, the linens cleaner, and the service better. I was told that the head of the commissariat had been abroad and had learned something of hotel service in Germany.

I saw several plays at the Meierhold Experimental Theatre. The technique was extraordinary. The action of the play continued while the scenes and sets were being changed before one on another part of the stage. I saw *Reetchi Kitai* (*Roar, China*), and shortly later had an opportunity of comparing the production with the Theatre Guild's in New York. The presentation was quite different. I went on an orgy of opera, ballet, and operetta. I met many interesting people. I spent evening after evening with my journalist friends and with engineers from other trusts. The Supreme Council of National Economy finally repudiated the annulment of my contract. I left much of my baggage at the Grand Hotel pending my return. There it still is—if not already removed by "due process of Soviet law." For, a couple

of months later, in New York, the contract was again terminated.

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THE NEW tomb of Lenin had been opened. I took my turn in the queue which, a quarter of a mile long, meandered in wide curves. There must have been two thousand persons waiting for the doors to open. It was a dark, grey day, but comparatively mild. There had been a January thaw—the temperature was above freezing. The snow was almost gone from the streets so that the going in sleighs was tedious and nerve-wracking, the horses pulling screeching steel runners over granite blocks. The mausoleum is an architectural gem. Modern in design, it is a perfect blending of red granite and black diorite, the blue of the labradorite crystals gleaming like precious stones in the reflected light from the snow.

For four hours almost daily a steady stream of humanity pours through its bronze portals. Single file, but with rapid step, one must enter, march down the stairs to the underground vault—all dimly lighted, all modern in motif—and finally enter the burial chamber of Lenin, god of the godless. The room is not very large, not over twenty-five feet square. A military guard of honor stands at rigid attention at the head of the dais. On this is a glass case. Therein, exposed to the view of those tens of thousands a day representing a cross-section of all the Soviet Union, lies the body of the Master. It lies there covered to the hands folded across the chest. The head is slightly raised. The pres-

ervation is nothing short of perfect. It is the calmness and repose of a child at sleep—it is the most stupendous thing in Russia.

Before me lay the earthly remains of one who had rocked the world to its foundations, one who had already become a legend, a religion even, one who was already history, whose likeness was pictured or modeled or cast in every office, every home, every public place in Russia. Here, then, was the birth of a new religion—a religion about to embrace at least a sixth of the world's surface and a tenth of its living beings. Here was hero worship and idolatry, if ever. Marx, Trotsky, even Stalin, are mortal. But this thing was different. So deeply was this legendary Lenin becoming imbedded in the naturally religious heart of the Russian masses, so quickly was he replacing Christ in the mystical minds of the mujiks, so great is the human urge to lean on something that can be deified, that the Kremlin was even then considering the removal of the body from the public view.

I felt the thrill and spell of it myself. I would have lingered beside that glass case indefinitely. But one must not stop; one must pass on. I climbed out into the foggy dusk and strolled along the walls of the Kremlin. The radio loud-speakers were still raucously pouring forth propaganda into the Square. I pondered as I passed the graves of the martyred disciples—the bodies of those followers who even in death were surrounding their leader. The Soviet experiment carried a new significance for me.

WORKERS' AND PEASANTS' INSPECTION

BUT THE impressions had become dimmed a few days later when, at the Latvian border, Red soldiers tried to take my films from me and succeeded in getting some of them. Nor did the sentiments which I had felt at the tomb of Lenin prevent me from gorging myself nearly sick with the gastronomical delights of the first buffet outside of Russia. I had the feeling that I was living again. I had been sick and now I was well again. Here was normalcy, cleanliness, plenty. I had left the Communist Utopia behind me—I was again in the world of Capitalistic Depression.

CHAPTER EIGHTEEN

AFTER THE FIVE-YEAR PLAN

AN AMERICAN returning from Russia is beset on all sides by the question, "Will the Five-Year Plan be successful." Any answer first must presuppose a definition of success—no categorical yes or no will suffice. I prefer to answer it by an analogy. Let us suppose that a group of promoters form a corporation to take over a large number of subsidiaries. Promises are made that at the end of five years the net available for the shareholders will be, let us say, five millions. But in the interim the world depression intervenes. At the end of the period for which the budget had been made, the net, instead of five, is three millions. Would you call this promotion a "success" or not? Interpreted strictly by the premeditated, objective, it had failed; interpreted by the production of a net profit as opposed to a deficit, it had succeeded.

So in the case of Russia's Plan. Some of the "subsidiaries," such as transportation, the light industries, and currency emission, will possibly run behind the

control figures. In the case of others, such as agriculture, forest products, oil, and some heavy industries, the quotas are not only being met but exceeded. And it must be constantly borne in mind that the control figures have been stepped up, not once, but frequently since the Plan was originated.

The objectives of the Kremlin are fivefold: industrial, agricultural, sociological, political, and psychological. It was purposed to transform an essentially backward agrarian country into a dominantly industrialized one in the short span of first, five, now, four years. Some 1,200 industries are said to be affected. To how well this is being accomplished most engineers returning to American from Russia can testify. The results in our own Trust can be taken as more or less typical. The maximum output of asbestos before the Revolution under private ownership was 23,000 metric tons in any one year; in 1930 it was 56,000. Whether the production will reach the 250,000 tons planned for 1933 is another matter. But to my mind the absolute figures are really of secondary importance. So it is with iron and steel, coal, electric energy, automobiles and tractors, locomotives, Diesel engines, turbines, and so on. The fact is, whether or not the control figures as to quantities and cost reductions are or are not met, the production of these commodities is already established on a basis which, leaving the extraordinary needs of the Five-Year Plan out of consideration, would make the Soviets nearly self-sufficient under normal conditions.

Russia always was a great agricultural country. Only now is she beginning to re-assume her former position in the output of fields and forests. That she can

become a dominating factor in the production of such raw commodities, no intelligent observer will deny. In fact, she has already become so. Witness the sensitiveness of the world grain markets to Russian rumors. Here, and, to my mind, here alone, is the Soviets' greatest threat to our own foreign commerce. We are protected internally by high tariff barriers. But our export markets for timber, agricultural products, and other raw commodities can very well be endangered.

Sociologically, the Soviets are in many respects a generation ahead of the rest of the world. They have a scientific and realistic point of view. With our smug Anglo-Saxon hypocrisy, we are content to tolerate the prolongation of the farce called, by some, Prohibition and its attendant racketeering. We still put our faith in an outmoded penalogical system whereby a widow supporting four children can be condemned to life imprisonment as a fourth offender, the offense being the possession of a pint of whiskey (Michigan). We still raise puritanical eyebrows at dissemination of birth-control information; we shudder at illegal abortion. We still countenance lynching. We still have Ku Klux Klans. Eventually, something good will come out of the sociological experiment in Russia.

Politically, internally at least, the Soviets are firmly intrenched; the GPU precludes anything else. Externally, I feel that most of the balance of the world's peoples are temperamentally or psychologically unfitted for a Communistic autocracy. For centuries Russia has been ruled by an iron fist, and this has not changed under present-day conditions. Without an iron-bound dictatorship, Russia could not survive, for it is the only

thing the Russian people know and understand. But let there be war with an external enemy, get four or five million peasants together again, organized under arms, and the GPU will be powerless. This, to my mind, is the cardinal reason why the Soviets will go so far to avoid a conflict. A second reason would be the resulting slowing-up of the Plan, and legal embargoes by other nations.

Psychologically, the Kremlin is trying within the short period of a few years to transform a dominantly agricultural country into an industrial one. In this phase of the Plan, to my mind, lies the fundamental weakness. The Kremlin has its finger so keenly on the pulse of the people that it can keep the proletarian belt deliberately tightened to within two notches of the desperation point —a significant testimony to how intensely this human element factor is being watched. Passive resistance—not war, not breakdown of foreign trade—is the great bugaboo which the leaders must meet today. Only a dictatorship, flexible and immediate in its reactions, could survive what has already taken place in Russia. Only a dictatorship, such as this, quick to recognize and admit its mistakes, can, with the scratch of a pen, ordain a cessation of the extreme tempo of collectivization, the reinstatement of a six-day week with a common holiday for all, and the reemployment of such capitalistic devices as piecework, bonuses, overtime, and "greater reward for greater effort." The Russian Bear can be pushed only so far. From time immemorial he has plodded along in his surly, dull, good-natured way. But a bear is noted for his ferocity, if pushed too far. The Czars found that out.

This leads me to my few concluding remarks. What comes after the Five-Year Plan? Certain promises of a near millennium have been made to the Russian people. The furiόus tempo of the Plan can be psychologically and physically maintained only so long and no longer. It is a foot race with a handsome prize for all the contestants at the finish. But there must be a finish—and there must be prizes for all. One cannot keep a mule walking forever by baiting him with a foodbag. If eventually it is not given to him, he will drop of sheer starvation. How long the Soviets can keep the masses "pepped up" to a war psychology—how long this childish enthusiasm for a new toy can be maintained—is anybody's guess. It is my belief that the leaders only hope to maintain this unnatural condition until the time when the nearly 20,000,000 youngsters become of age. Then the story takes on an entirely different aspect. These Young Pioneers and Komsomols never knew czarist Russia; most of them do not remember the War; none have had organized religious training. These are the real fanatics. Their religion is Communism, their God, Lenin. Their textbooks are the Primers of the Five-Year Plan. They learn *Amerikanski Tempo* and *Fordismus* before they learn arithmetic. Their knowledge of history is what the Kremlin wants them to believe. They are the real products of the greatest organized system of propaganda the world has ever known. They are the real answer to "after the Five-Year Plan."

The Plan was originated at a time when a world depression was unthought-of. Even Moscow, with its constant reiteration of the imminent breakdown of the capitalistic system, did not forsee the world crisis of these

past two years—a crisis that has militated against the Soviets probably as much as it has against the other countries. It threw a finely adjusted mechanism out of balance. It meant exporting two bushels of wheat to procure the same foreign credits which in turn purchased but fifteen or twenty per cent more than two years ago. The vibration of this out-of-balance is a potential source of destruction to any machine. Much depends merely upon how long it can be run in this condition.

I wonder, also, at the continued effect upon the physiology and psychology of a people being continually denied certain vitamins and essential foods. I wonder at the probable mental outcome of forced feeding of mechanical, engineering, and sex subjects to mere babies. I wonder at the exorbitant rate of machinery depreciation and obsolescence, for which the only replacement fund at the present time is on paper. I wonder at the little we hear these days of "Five Years in Four." I wonder at the effect of the dearth of skilled labor. I wonder whether the Russian worker can become efficient at mass-production. I wonder what will happen when the foreign technician and overseer must leave.

I do *not* wonder at Russian costs. These are purely matters of bookkeeping—taking a medium of exchange out of one pocket and replacing it in the other. The only real costs are the depletion of natural resources and requirements for *valuta*. Nor do I look with alarm at the talk of a flood of manufactured products glutting the world markets at the end of the Plan. Firstly, the quality of these in the main will probably cancel their competitive danger. Secondly, fickle Style demands constant

change. I am quite sure that by the time the Soviets are able to take care of their home requirements in, let us say, Model A Ford cars, the Wizard of Dearborn will be exporting something quite different.

And lastly, the promises of the millennium must be made good. Commodities must be given to the masses, and with the even partly successful completion of the Five-Year Plan, this necessity to live up to their promises will keep the great bulk of the Russian output at home for many years to come. With the end of the present Plan, that terrific urge to dump whatever is available, whatever can be squeezed from the people, sacrifices such as only the American working for the Soviets can realize, and that dreadful *nichevo* of prices obtained as long as *valuta* is begotten will have to a great extent been removed. In this volume we have tried to record only the specific. We must not look at specifics but at generalities.

And after the Five-Year Plan comes another Five-Year Plan.

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